HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

VOLUME 17, NO. 10, ABSTRACTS 1374-1523. OCTOBER 1977

LONDON: HER MAJESTY'S STATIONERY OFFICE

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First published 1977

ISBN 0 11 722620 3
ISSN 0018 5507

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HOSPITAL ABSTRACTS

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HOSPITALS IN GENERAL

1374. AMERICAN HOSPITAL ASSOCIATION. LIBRARY. ASA S. BACON MEMORIAL. **Hospital literature subject headings.** 2nd edition, edited by Alice Dunlop. Chicago, AHA, 1977, vii, 189 pp. $10.00

Hospital Literature Subject Headings is a list of headings and cross-references used to control the literature acquired by the Library of the American Hospital Association. The scope of the thesaurus covers the administration, planning, and financing of hospitals and health care organizations, and the administrative aspects of the medical, paramedical and prepayment fields. This second edition is a revised version of the 1965 thesaurus.

HOSPITALS IN GREAT BRITAIN

1375. OFFICE OF HEALTH ECONOMICS. **Compendium of health statistics.** 2nd edition. Compiled by R. C. Chew and N. E. J. Wells. London, OHE, 1977, [93] pp. £5.50

This book considers the health statistics for the United Kingdom. Aspects covered include: the cost of the National Health Service from 1951 to 1975; the number of staff employed in various sections of the health service; the hospital services; total number of allocated beds, length of stay and use of specialties; the number of general practitioners in the United Kingdom; and the morbidity rates in the United Kingdom. The information is set out in a series of tables and figures, in loose-leaf form.

1376. **Preston DGH.** *Hospital Development*, London, 1977, May/June, vol. 5, no. 3, pp. 20-21.

The second stage of Preston District General Hospital will cost seven million pounds and take three years to build. It will consist of a seven-storey building to house 11 operating theatres, a children's ward and 16 general wards each containing 30 beds, and a single- and two-storey building containing an intensive care unit and special wards for ophthalmology, ear, nose and throat, neurosurgery, burns and plastic surgery. The multi-storey block has a reinforced concrete structural frame with brick cladding. The smaller building is steel-framed with brick and block cladding. A ground plan of the hospital and a photograph of a model are included.

1377. ROBINSON, W. **The new St. Thomas' Hospital.** *Nursing Mirror*, Sutton, 1977, June 9, vol. 144, no. 23, pp. 13-16.

The recent opening of the new north wing of St. Thomas' Hospital, London, completes the second stage of a rebuilding programme that has been designed to provide the most advanced patient care, teaching and research facilities anywhere in the world. The wing, which cost some £30 million, comprises a 630-bed ward block and a treatment block for out-patient departments, laboratory services, operating

theatres, a number of administrative services and the Rayne Institute for medical research. The 27 wards occupy floors six to 12 of the 14-storey block. Three of the ward floors are of standard design with four 28-bed wards divided into two six-bed and three four-bed bays and four single rooms. All are on the perimeter with a central services core. The wing is fully air-conditioned. Each ward floor has two rooms for relatives of dangerously ill patients to stay overnight. A colour code is used, with furnishings and finishings to match, as a guide to location. Four of the ward floors have been specially designed to house specialized departments: metabolic and endocrine ward, maternity unit, children's department and ophthamology ward. There are eight main operating theatres, with six theatres for minor procedures in the surgical out-patient department. Eight photographs, but no plans are included.

1378. RUSSELL, P. M. G. **A history of Exeter Hospitals, 1170-1948.** Exeter, Exeter Medical Post-Graduate Institute, Library, 1976, vii, 171 pp. £4.00

An account is presented of the development of the Exeter Hospitals from their beginnings in 1170 to 1948 when the National Health Service was inaugurated. The care of the sick in Exeter is considered from mediaeval times with the monastic foundation to the Reformation and from the Age of Reason to the twentieth century. Hospitals described include the Magdalen Hospital, the Blue Maids' Hospital, Royal Devon and Exeter Hospital, the City Hospital, the Exeter Dispensary and the Princess Elizabeth Orthopaedic Hospital. A bibliography is included.

HOSPITALS IN OTHER COUNTRIES

1379. LALANDE, A.-C. 'Ces malades qu'on fabrique: la médecine gaspillée', la France prochainement peuplée de 53 millions de malades? **['The patients one creates: wasted medicine', will France soon be inhabited by 53 million patients?]** *Hospitalisation Nouvelle*, Paris, 1977, April, no. 59, pp. 6-9.

A brief review of Professor Sournia's book 'The patients one creates: wasted medicine', published in January, 1977, is followed by two extracts from the book itself. In the first Professor Sournia criticises the way in which the hospital tariff is calculated and suggests that hospitals should agree their provisional budget for the year with the sickness insurance institutions which would then make 12 monthly payments to the hospital. In the second extract he criticises the rigid controls imposed by both government and sickness insurance institutions on the private sector and complains that too many unnecessary beds are being provided in the public sector.

1380. NORRIS, A. H. **The British hospital in Lisbon.** Lisbon, The British Historical Society of Portugal, 1973, [ii], 132 pp. £1.00

An account of the development of the British Hospital in Lisbon from before 1786 to the present day. The British factory hospital established by Gérard de Visme in 1794 and used until 1896 solely for merchant seamen is described. The development of the hospital from its establishment on a new site in 1910 when patients other than seamen were admitted, to the present day is outlined.

1381. MARTIN, M. **Medical City Baghdad enters its second stage.** *Middle East Health Supply & Service*, Sutton, 1977, May, vol. 1, no. 5, pp. 14-16.

The first stage of Baghdad's Medical City, a 12-storey 1,000-bed teaching hospital, was opened in 1970, and the second stage is now under way. The complex, when completed, will provide a centre of excellence for medical teaching and practice in Iraq. The design of the project is outlined. The departments which make up the teaching hospital will include teaching and research facilities, pathology laboratories, and a comprehensive out-patients' department which will be able to deal with up to 1,000 cases a day. The master plan for Medical City integrates the teaching, research and clinical functions by positioning the library at the centre of the three departments. The National Library of Medicine will be at the core of Medical City and will be linked to the MEDLARS and MEDLINE computerized information system. The present cost of the project is assessed at £65 million but the final figure is expected to be higher. The problems the architects and surveyors had to contend with are outlined. A layout is included of the master plan for Medical City.

PLANNING, DESIGN AND CONSTRUCTION

See also Abstract Nos. 1415, 1485, 1490

1382. ALIX, G. À propos de gestion. **[On management.]** *Gestions Hospitalières*, Mantes, 1977, May, no. 166, pp. 381-389.

The author discusses some factors which hospital administrators must bear in mind when planning for the future. These include: (i) changes in the age structure of the population, increased economic activity by women, movements of population; (ii) changes in the pattern of medical activity, in particular the tendency for doctors to work in teams rather than independently, rational manpower planning, flexible hours for staff, allocation of funds for research; and (iii) the growing importance of out-patient clinics, the balance between domiciliary and hospital haemodialysis equipment; the hospital's responsibility for community health and preventive medicine, and in-service training for doctors.

HOSPITAL DESIGN

1383. MORONI, A. and GIANNONI, P. Il rapporto ospedale—utenza. **[The relation between hospital and users.]** *Tecnica Ospedaliera*, Milan, 1977, April, vol. 7, no. 4, pp. 28-35.

In the first part of this article the authors examine, with the aid of seven diagrams, variations in the siting of departments within a general hospital in relation to the admissions area, which is considered as a filter through which patients are channelled initially, and also the number of entrances and exits required (for patients, medical staff, visitors, emergencies, etc.). In the second part they challenge the current concept of flexibility in hospital design on the grounds that preventive medicine will mean fewer rather than more wards, that technological developments will require spatial re-organization rather than more space, and that hospitals may become obsolescent not only in terms of structure but also in terms of planning methodology.

DESIGN OF INDIVIDUAL GENERAL HOSPITALS

See Abstract Nos. 1376, 1377, 1381

WARDS AND PATIENTS' ROOMS

1384. BLAKE, P. **Come back Florence—you are badly needed.** *World Medicine*, London, 1977, June 1, vol. 12, no. 17, pp. 49, 51-52.

The author describes a discussion between doctors, nurses and patients over the relative merits of the Nightingale design for a hospital ward and the race-track design or single rooms for all which have emerged since the National Health Service began. These new designs make it impossible for nurses to watch over a whole ward at any one time; neither did nurses welcome the idea of mixing surgical and medical patients of both sexes in the same ward. As for the patients, some want privacy while others hate being alone. Perhaps the best compromise is updated Nightingale wards for the very ill and those liking company, and more single rooms than Miss Nightingale provided, for the others.

ENGINEERING SERVICES

ELECTRICAL INSTALLATIONS AND EQUIPMENT

See Abstract No. 1419

COMMUNICATION SYSTEMS

See also Abstract Nos. 1487, 1501, 1502

1385. SUTHERLAND, A. **Shared education in small hospitals.** *Dimensions in Health Service*, Toronto, 1977, May, vol. 54, no. 5, pp. 40-41.

This paper outlines the development of an education service shared by 16 hospitals in the Okanagan-Mainline area in the interior of British Columbia. An audiovisual producer is employed by the group and is based at one of the hospitals. The terms of reference of the education group, which meets every two months, are listed. It sets the priorities for programmes to be produced by the audiovisual producer, who is also available to member hospitals for special projects, to advise on equipment purchases and instruct staff on its use and care. Productions have included intravenous technique, body mechanics, and emergency resuscitation, and for patient education, child care for new mothers, special diets, exercises after myocardial infarction, colostomy care and breast self examination.

TRANSPORT IN GENERAL

1386. BENNETT, C. P., DUNCAN, I. B. and STIFF, G. **Study of the transport arrangements in Oxfordshire Area Health Authority.** Reading, University of Reading, Department of Applied Statistics, Operational Research (Health and Social Services) Unit, 1977, 55pp.

This report draws together the work of the Unit on transport problems in Oxfordshire Area Health Authority. The main problems were vehicle routeing, scheduling, maintenance and replacement, fuel purchase and taxi use. The theoretical and practical problems of scheduling an area wide fleet for the delivery of CSSD, pharmacy supplies, mail and pathology specimens are discussed. A short study on the use of taxis, and recommendations on vehicle replacement policy is presented. It is estimated that the saving from the implementation of the plans is £22,000 per annum.

1387. BOTZENHART, K. Anforderungen der Hygiene an Tranportsysteme für Krankenhäuser. **[Hygiene requirements of hospital transport systems.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1977, Jan., vol. 18, no. 1, pp. 47-50.

This paper, read at a conference on hospital logistics held in Dortmund in May 1976, is concerned with the hygiene of automated transport systems. Four types of contamination with micro-organisms are distinguished: contamination of the transported goods; of the wrappings; of cartons, sacks, etc; and of the transport container. Contamination during transport can result from: contact or droplet infection from staff when loading and unloading; particles dispersed from infected material; airborne particles on transport routes and at loading and unloading points; contact with floors, walls and other conveyors; and from vermin. Materials which could be infected or which must at all costs resist contamination (e.g. sterile goods) must be transported in sealed containers. Close attention must be paid to the regular and thorough cleansing of conveyors, containers and trucks; and great care must be taken to prevent contamination during loading and unloading and when goods are being taken to the point of use. Ducts and chutes present contamination risks and should not be used for transporting waste.

HEATING

See Abstract Nos. 1419, 1479

MAINTENANCE OF BUILDINGS AND EQUIPMENT

1388. SIMEDINGER, E. A., TOPHAM, S. W. and WONG, D. L. **The case for the in-house clinical engineer.** *Dimensions in Health Service*, Toronto, 1977, May, vol. 54, no. 5, pp. 28, 33-34.

The purpose of this paper is to draw attention to an important and new member of the health care team, the clinical engineer. His involvement is brought about by the expanding, on-going and ever-increasing complexity of medical hardware. The advantages of an in-house clinical engineer compared with outside contracts are discussed and the functions of the engineer are listed. Recent studies show that the average cost per man hour for outside service is $30.00 and for an in-house clinical

engineer is $10.00. Three possible disadvantages of in-house clinical engineers are easily refuted: testing equipment need not be expensive; cost of space for parts and service is easily made up elsewhere; and the time and money spent on training courses for the clinical engineers is well spent.

EQUIPMENT, FITTINGS, FURNITURE

BEDS, COTS, ETC.

1389. SAVAGE, J. H. **Traction supports for hospital cots.** *Nursing Mirror*, Sutton, 1977, June 9, vol. 144, no. 23, pp. 36-37.

The disadvantages of some conventional rigid supports, to which cords are attached during hip-traction treatment, are outlined. Adjustable traction units do not have these disadvantages; the dimensions of a unit of this type are given. A more recent experimental traction unit is also illustrated and described. The main objective was a reduction in height of the control portion so as to allow the cot mattress to be tilted at a steep angle. Although serving the purpose for which was designed, this model also has a less attractive appearance than the adjustable type described and would also seem to limit, to a somewhat greater extent, the access of medical staff to a child patient.

LIFTING DEVICES, HOISTS

See Abstract Nos. 1389, 1440

ELECTRONIC EQUIPMENT

See Abstract Nos. 1476, 1501, 1502

STAFF GENERALLY

STAFF COMPLEMENTS

See Abstract Nos. 1397, 1405, 1412

RECRUITMENT

See also Abstract No. 1406

1390. QUATRANO, L. A. and CLARY, L. S. **Oversupply of health administrators: true or false?** *Hospital Progress*, St. Louis, 1977, April, vol. 58, no. 4, pp. 88-90, 92, 94.

In the United States the increasing supplies of graduates with masters' degrees in hospital administration, a decrease in opportunities for posts in traditional hospital settings and significant differences in the employment of male and female graduates, have resulted in graduates not obtaining the high entry-level positions their predecessors once obtained. The reasons behind the change in entry levels are discussed.

The implications of a study of career patterns of graduates carried out by the Office of Student Affairs of the Association of University Programs in Health Administration, Washington, DC, are outlined. These findings plus patterns of graduate geographical distribution can be used for planning future training schemes.

CONDITIONS OF SERVICE

See Abstract No. 1413

STAFF MANAGEMENT

See also Abstract Nos. 1407, 1420

1391. SUNDERLAND, J. C. **Models for line-staff relations.** *Health Services Manpower Review*, Keele, 1977, May, vol. 3, no. 2, pp. 17-20.

In the continuing debate about systems for hospital administration, functional management is often cited as the villain of the piece. That point in the administrative structure at which functionalization takes place is not constant in the National Health Service (NHS) and it serves as a barometer for the measurement of administrative staff morale. Above the line of functionalization general administrators have financial and managerial control, below it the professionals are in charge. It is argued in this paper that the differential effect on administrative and professional morale is not accounted for in much of the organizational theory which surrounds functional management. Two alternative positions for the dividing line of functionalization were offered for the post-1974 period in the NHS: (i) the sector administrator manages all the support staff and is responsible for their budgets; and (ii) functional managers at district level are responsible for the different services and, although they outpost staff to the sector, they remain responsible for the budget. The advantages and disadvantages of these alternatives are discussed.

STAFF RELATIONS

1392. METZGER, N. **Preventive labor relations: communication the key.** *Hospital Progress*, St. Louis, 1977, April, vol. 58. no. 4, pp. 79-82.

The time for implementing sound policies for staff management in hospitals in the United States is before staff look outside the organization for answers to their unresolved needs and unfulfilled aspirations. Communication is the key to winning the loyalty of staff, and is best developed in a climate of trust and confidence. A checklist for ascertaining the current state of industrial relations within a hospital is presented. The need to establish formal complaint and grievance procedures is discussed. By allowing conditions of unrest to develop the organization will lay itself open to the development of unionization. A questionnaire to ascertain the vulnerability of an organization to unionization is included.

STAFF TRAINING

See also Abstract Nos. 1385, 1398, 1408-1410, 1466, 1472, 1482, 1510

1393. CHANUDET, M. Qu'est-ce que la formation professionnelle continue? **[What is in-service training?]** *Gestions Hospitalières*, Mantes, 1977, May, no. 166, pp. 391-396.

Documents used in a survey concerning in-service training in the hospital at Boulogne-sur-Mer are reproduced and the results of the survey analysed. Approximately half of the staff were interested in this form of training and the greatest demand came from male staff aged 25-30 years and female staff aged 20-30 years. Lectures and courses and periods of on-the-job training were generally preferred. A further questionnaire, designed to yield more precise information on the type of training required, is also reproduced.

STAFF WELFARE

See also Abstract Nos. 1427, 1446, 1489

1394. SARATA, B. P. V. **Improving staff satisfaction through job design.** *Administration in Mental Health*, Rockville, 1976, vol. 4, no. 1, pp. 60-65.

Job satisfaction affects the quality of the services provided in human service organizations. The relationship between staff satisfaction and job design has been demonstrated repeatedly within industry. This paper proposes a model for improving staff satisfaction through redesigning jobs and roles. Critical factors are: (i) the experienced meaningfulness of the work; (ii) experienced responsibility for work outcomes; and (iii) feedback concerning work performance or outcomes. Experienced meaningfulness is seen as a function of three job design variables: task-significance, task-identity and skill-variety. The feasibility of providing most staff with a significant degree of autonomy is limited; staff participation in case conferences and staff meetings is the best method of achieving staff input. Feedback about performance is essential; the two relevant job design variables are feedback about client changes and opportunity for learning.

SPECIAL CLASSES OF STAFF

ADMINISTRATIVE AND CLERICAL STAFF

See also Abstract No. 1390

1395. **Seventy-five years: the Institute of Health Service Administrators 1902-1977.** *Hospital and Health Services Review*, London, 1977, June, vol. 73, no. 6, pp. 193-218.

The founding of the Hospital Officers' Association in 1902 was not only the launching of what is now the Institute of Health Service Administrators, it also marked the beginning of the distinctive profession of hospital, and subsequently health service administrators. This paper traces the history of the Institute and discusses some of its activities, including: the annual conference; education; courses, conferences, etc; finance; protection of members' interests; branches and regions; publications; headquarters; staff; social activities; benevolent fund. A list of honorary officers is included.

1396. PREFFER, J. and SALANCIK, G. R. **Organizational context and the characteristics and tenure of hospital administrators.** *Academy of Management Journal*, Atlanta, 1977, March, vol. 20, no. 1, pp. 74-88.

The professional background and tenure of hospital administrators in the United States were examined in relation to organizational size, competition for funding and staff, relations with the local business community, and sources of funds. The results are consistent with Thompson's (1967) argument that succession to leadership problems is related to the ability to cope with organization uncertainties.

MEDICAL STAFF

See also Abstract Nos. 1414, 1482

1397. ELSTON, M. A. **Hospital medical staffing: surplus or shortage?** *Health Services Manpower Review*, Keele, 1977, May, vol. 3, no. 2, pp. 4-8.

Attention is currently being given to the question of whether there is or is likely to be a shortage or surplus of hospital medical staff. This paper discusses some evidence about the current situation with respect to hospital consultant and junior posts, and relates these to the current debate. The limited evidence presented does suggest that there may be too many doctors in the National Health Service (NHS) for currently preferred posts in the present recession. From this it does not follow that there is a surplus of doctors according to other possible criteria. There is an immense number of factors potentially influencing wastage rates. History has a habit of repeating itself in the NHS, and the precedent of the Willink report whose cuts were more than restored within three years is pertinent. Proponents of the 'surplus' argument may think that the Willink report should be rehabilitated. What would be retrograde is a return to the assumptions on which both the Willink and Todd report calculations were based. To cut drastically medical school intake and leave the career structure as it is will not necessarily bring about 'balance' any more than expansion has.

1398. FREDRICKSON, J. W. **Organizing for better medical school management.** *Health Care Management Review*, Germantown, 1977, vol. 2, no. 2, pp. 71-76.

Growth, increasing organizational diversification and specialization, and public demands for accountability make it mandatory that medical school managers begin to move beyond simple administration and into true management. This paper describes an organizational structure that is designed to help medical schools deal with critical management problems. Bowman Gray School of Medicine, Wake Forest University, has created a new position at departmental level that ties into the central administration. The 'departmental manager' acts in three capacities: (i) as staff assistant to the department chairman; (ii) as line subordinate to an independent manager (called an 'institutional manager') in the central administration, and (iii) as a participant in a problem-solving group that acts in a consulting capacity to any department within the school. The roles of the institutional and departmental manager, the introduction of the new concept, and the selection of the departmental manager are discussed.

NURSING STAFF

See also Abstract Nos. 1460, 1494

1399. HECTOR, W. **The role of the nurse.** London, British Broadcasting Corporation, 1977, 64pp.

This book aimed at the student nurse, considers the role of the nurse in providing planned care in a variety of environments. Areas discussed include: the medical ward; surgical ward; operating theatre; children's ward; cancer patients; ante-natal care; the elderly; accident and emergency department; ear, nose and throat department; and care of the mentally handicapped. Discussion points and a list of selected references are included after each section.

1400. ABBEY, J. C. **Physical indicators in clinical nursing research or why do I need to know what?** *Journal of Advanced Nursing*, Oxford, 1977, May, vol. 2, no. 3, pp. 227-238.

Clinical nursing uses all three classical approaches to research: descriptive, experimental and historical. Only recently, however, have the investigators begun to apply truly basic scientific findings to understand problems of nursing care—problems that nurses are better equipped to understand, to delineate and to solve than any other group. A case is made for the use of sensors, such as electrodes, thermisters and thermometers, designed to note or sense change in physical indicators or measurable signs and symptoms. These sensors, it is argued, afford clinical nursing research appropriate measurement and recording tools for any type of study. It is conceded that physical indicators used in research must be subjected to some form of consensual validation and calibration and advice is provided. It is concluded that even the experimental studies are largely descriptive; however, the instruments of today foreshadow future developments in improving the quality of patient care and adding to the 'science of practice'. A list of 51 references to the literature is included.

1401. HAYWARD, J. C. **Psychological indicators in nursing research.** *Journal of Advanced Nursing*, Oxford, 1977, May, vol. 2, no. 3, pp. 251-259.

It is argued that the psychological perspective not only contributes to improving the provision of health care but also contributes to nursing research by enriching insights into what nurses do and the effects of these activities on their patients and clients. In particular the operant approach, the concept of anxiety and communications are discussed in the context of nursing care and research. It is contended that the analysis of psychological aspects of the care environment seems to be one of the most relevant and challenging fields of research which psychologists and nurses face together.

1402. HOCKEY, L. **Indicators in nursing research with emphasis on social indicators.** *Journal of Advanced Nursing*, Oxford, 1977, May, vol. 2, no. 3, pp. 239-250.

The first part of this paper discusses the indicator theme in general, with particular reference to the need to identify indicators, their purpose, their choice and development, and problems and possibilities of measurement. The second part sets these general points into the social context illustrated by examples, many of which are derived from the author's own research activities. One of these is used to highlight some of the intertwining strands in the complex network of quality indicators in nursing research.

The author feels fairly certain that the successful future of nursing research, in which the indicator approach is likely to be significant, lies in greater collaborative integrated effort.

1403. TREECE, E. W. and TREECE, J. W. **Elements of research in nursing.** 2nd edition. Saint Louis, Mosby, 1977, x, 349 pp. £6.45

The changes in the field of nursing research have necessitated the production of a second edition of this book. The second edition is divided into six sections to give the researcher a greater understanding of the principles of research before attempting to collect data. The sections include: (i) the research process; (ii) theory and method; (iii) preparation for collecting data; (iv) collecting data; (v) analyzing data; and (vi) presentation of findings.

1404. CONGALTON, A. A. **The functions of a nurse.** *Nursing Times*, London, 1977, June 9, vol. 73, no. 23, occasional papers, pp. 81-83.

In 1973 the Government of New South Wales established the Nurse Education Board with the responsibility for providing the Minister of Education with advice concerning matters pertaining to the education of all nurses. A research committee was set up and one of its first tasks was to provide a generally accurate picture of the functions of a registered nurse. The committee first arranged a workshop which prepared a preliminary statement for wide circulation. The replies received were numerous and the comments constructive. These were incorporated in a revised statement, which is reproduced. The concept of the nursing process is embodied in five facets, from which all functions emanate: identification of individual needs; interpretation of individual needs; planning care to meet those needs; implementation of planned care; and evaluation of care and subsequent needs. The nurse's functions are listed under the headings: professional responsibility; basic nursing care; specific nursing procedures; observation and action; human relations; administration; and education.

1405. MITCHELL, M. and GODDEN, E. **The Aberdeen formula: a trial in SE Thames.** *Nursing Times*, London, 1977, June 2, vol. 73, no. 22, pp. 839-840.

The Aberdeen formula, a method of fixing nurse staffing establishments developed in the Grampian Health Board, was tested in Farnborough Hospital, excluding the psychiatric wards. Two weeks before the trial, teach-ins were arranged to explain the formula to the nursing staff. Ward sisters and their deputies were asked to complete daily dependency sheets for 28 days and keep a record of time on duty spent outside the ward. Using the times laid down by the formula and the records kept, the number of daytime nursing hours required were calculated for each of the 20 wards involved. The actual staffing figures and those recommended by the formula were computed to reveal shortage or excess of staff and arranged to produce 'priority ranking' for the 20 wards. Rankings were also made by a senior nursing officer which produced a similar result. Further application of the formula is being considered in the South East Thames Region.

1406. PAIRE, C. H. Le mariage et la naissance des enfants: deux causes d'abandon précoce de la profession d'infirmière. **[Marriage and childbirth: two reasons for nurses leaving their jobs early.]** *Gestions Hospitalières*, Mantes, 1977, May, no. 166, pp. 399-400, 402-404, 406-407, 409-412.

Statistics show that 68 per cent of nurses leave nursing on marriage or on the birth of their first child. Many of these women could be attracted back to the profession if hospitals were prepared to provide creches and day nurseries, to allow part-time or half-time work, and to adapt working hours to individual needs.

1407. MOORES, B. and MOULT, A. **Sources of variation in the pressure of work index in thirty hospital wards.** *Journal of Advanced Nursing*, Oxford, 1977, May, vol. 2, no. 3, pp. 271-279.

In a three-month study in 30 wards (general medical, general surgical and orthopaedic) in three hospitals, the day time work load was estimated using a nurse/patient dependency scheme. These figures were contrasted with the hours of nursing made available to calculate a pressure of work index. It was clear that considerable disparities existed between what might be termed as the supply of and demand for care. In order to identify the source of the variability in the ratio of these two measures, the data were subjected to an analysis of variance. This revealed that in two of the three hospitals most of the explained variability arose from difficulties experienced in meeting week by week fluctuations, whereas in the third hospital most was attributable to differences between days of the week.

1408. MCFARLANE, J. K. **Developing a theory of nursing: the relation of theory practice, education and research.** *Journal of Advanced Nursing*, Oxford, 1977, May, vol. 2, no. 3, pp. 261-270.

The literature on the nature of concepts, theory and principles is reviewed. It is held that the relationships between nursing theory, practice, education and research are close and reciprocal. Each is related to the other, but it is argued that the hub of the relationships is nursing practice, as nursing is a practice discipline.

1409. MALLICK, M. J. **Do nursing educators preach what they want practiced?** *Nursing Outlook*, New York, 1977, April, vol. 25, no. 4, pp. 244-247.

There is a large gap between nurses' understanding of nursing theory and their ability to apply it in practice. The reasons are held to be that: (i) teaching in schools of nursing is based on a medical rather than a nursing model; (ii) nursing teachers are too occupied with details; and (iii) the nurses' approach to care is based on intuition rather than decision-making. The author does not agree that teaching is medically orientated, but claims that nursing is taught for its own sake rather than for its application. Students are taught the nursing process early in their courses, but are not taught about situations in which this process can be applied until much later. All teaching must be directed towards the application of knowledge in a clinical setting, not towards a collection of facts which the nurse cannot apply to a particular case.

1410. AROSKAR, M. A. **Ethics in the nursing curriculum.** *Nursing Outlook*, New York, 1977, April, vol. 25, no. 4, pp. 260-264.

The author carried out a survey to discover to what extent ethical issues and problems are included in nursing courses. Two-thirds of the 86 respondents said that ethical aspects were included throughout the course and thought that ethics should be part of a broader programme; over half did not provide any definite planned study of ethical issues. Only five per cent felt that ethics should be an independent study and many pointed out that courses were open to nurses in departments of philosophy and theology. Some felt attending other courses would not cover issues especially applicable to nursing, but nine per cent felt a nursing-only approach had no advantages. Half the respondents thought there was a need for further development of ethics education in their courses, 35 per cent indicated no such need and 10 per cent did not answer the question. The author strongly believes that nursing students should have instruction in types of ethical argument and decision-making, taught and paid for by their own department.

1411. SMITH, C. C. **Primary nursing care—a substantive nursing care delivery system.** *Nursing Administration Quarterly*, Germantown, 1977, vol. 1, no. 2, pp. 1-8.

The advantages of primary nursing care touch every person on the health care team: patients, physicians and health care staff. The key objective is to provide quality patient care and services to patients and their families by focusing nursing care on each individual patient's needs. As primary nursing care is implemented in the acute care setting, the substantive factors that emerge are: (i) patient-centred care; (ii) accountability for patient; (iii) continuity of care; (iv) comprehensive patient care; (v) co-ordination of patient care; and (vi) staff development. Important organizational elements of primary nursing care include: the autonomous primary nurse; districts of eight to 10 patients for each intermediate care primary nurse; care giver-to-care giver communication; and activated patient through patient education.

1412. RIMEL, R. W. **Nurse practitioners and neurosurgical manpower.** *Surgical Neurology*, Tryon, 1977, Jan., vol. 7, no. 1, pp. 19-20.

A review of the educational background, professional responsibilities and interim appraisal of the neurosurgical nurse practitioner at the University of Virginia is presented. The training schemes are usually offered to registered graduate nurses who have direct contact with patients under the supervision of a doctor. The duties of the neurosurgical nurse practitioner are discussed. The advantage of training the neurosurgical nurse practitioner is that excellent patient care can be maintained without increasing the size or length of the neurosurgical residency training scheme. The presence of the nurse practitioner scheme has made the training scheme more desirable for the residents and has increased the effectiveness of the department as a whole.

1413. **Advice on contracts for student and pupil nurses.** *Nursing Times*, London, 1977, May 19, vol. 73, no. 20, occasional papers, pp. 69-72; May 26, vol. 73, no. 21, pp. occasional papers 73-74.

In February 1976 the General Nursing Council for England and Wales issued the first of a series of advice notes on management in schools in nursing. Part of this,

dealing with contracts for student and pupil nurses, is reproduced. Subsequently the Council issued another circular which provided information about further implications of the Trades Union and Labour Relations Act and the Employment Protection Act, together with examples of cases decided by industrial tribunals. This circular is reproduced in full. The circular deals more specifically with why a student or pupil nurse may be considered for dismissal and the methods by which warnings and possible dismissal may take place.

OTHER PROFESSIONAL AND TECHNICAL STAFF

1414. BROUN, G., DAGRAS, G. and MOREAU, C. L'ingénieur biomédical et le corps médical hospitalier. **[The biomedical engineer and the hospital medical staff.]** *Gestions Hospitalières*, Mantes, 1977, Feb., no. 163, pp. 109-114.

The author outlines the functions and responsibilities of the biomedical engineer within the hospital. The engineer will advise on the purchase of medical equipment and instruct the hospital staff (including the doctors) in the correct use of this equipment; he will be in charge of a team which will maintain the equipment and carry out at least some of the repairs to it; he will advise the medical staff on the use of statistical analysis in the assessment of the reliability and performance of equipment, and on test procedures. He may also co-operate with the medical staff in making improvements to existing equipment and in devising new prototypes.

ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 1375, 1382, 1396, 1398, 1426, 1495, 1510

1415. MELIN, C. N. and RABKIN, M. T. **Understanding the context for long-range planning in hospitals.** *Health Care Management Review*, Germantown, 1977, vol. 2, no. 2, pp. 13-20.

Using their experience at Beth Israel Hospital, Boston, Mass., the authors illustrate how four interrelated and equally important components impinge on long-range planning and how planners should evaluate the impact of major decisions. The components are: (i) the characteristics of the hospital itself; (ii) the external environment (federal, state and local government regulations, community demography, pressures from community and other consumer groups and competition from other hospitals); (iii) the hospital's understanding of its social responsibilities; and (iv) the views of policy-making group within the institution. The object of long-range planning is not to develop a 'master plan' for the future, but rather to devise an ongoing management system that enables the hospital to act in ways that are responsive to its internal and external environment and true to its history and goals. Managers can use long-range planning as a tool to ease the hospital into changing modes of operation and to achieve, over time, a smoother interaction among their several constituencies.

1416. RENAER, M. Problemen van bio-ethiek in ons ziekenhuisbeleid. **[Hospital administration and bio-ethical problems.]** *Acta Hospitalia*, Leuven, 1976, vol. 16, no. 4, pp. 294-304.

The paper comments on the diversity of bio-ethical problems increasingly confronting modern hospital administrations. It discusses: (i) problems concerning

procreation, i.e. methods of family planning, sterilization and abortion, attitudes of doctors and patients, involvements of administration, legal aspects; (ii) priority decisions when resources are scarce as in cases of intensive care therapy, renal dialysis, transplantations, etc.; (iii) therapeutic treatments involving experiments on human beings, transplantations, re-animation, artificial prolonging of life, patients' wishes, consultations with relatives, determination of death. Responsibilities are becoming too great to be left to individual doctors or nurses. It is suggested that hospital ethics committees should be set up, which include members of administrative and medical staff, a legal expert and a moralist, with the purpose of drawing up codes of ethics and acting in an advisory capacity.

1417. LOBE, L. **The influence of regulation on hospital accounting and management.** *Journal of Contemporary Business*, Seattle, Wa., 1977, vol. 6, no. 1, pp. 43-55.

Cost containment can only be successful when a better health care delivery system with an acceptable price tag is achieved. The major reasons for hospital cost increases in the United States are discussed. The development of uniform accounting and budgeting systems for hospitals is outlined. The need to recognise different cost factors among hospitals is essential if regulatory agencies are reviewing budgets and rate requests. Various methods of analysing cost centres are outlined. The problems and prospects in hospital planning include: reimbursements and productivity; utilization and productivity of facilities; professional relationships and contracts; and expectations of consumers and providers. The budget review system alone will not solve the high cost of hospital and health care; a solution to the cost problem has to be found to avoid bankrupting either the patient-consumer by insurance premiums and taxes, or the nation by higher health budget requests.

GOVERNING BODIES, COMMITTEES

1418. ROBINS, A. J. **Governing boards and decision making.** *Administration in Mental Health*, Rockville, 1976, vol. 4, no. 1, pp. 19-25.

Governing boards should use a rational process to make decisions even though value judgments influence the process and data are not always available. Based on March and Simon's model of the 'rational' administrator, this paper discusses the application of a generic approach to decision making by governing boards. The board must first specify the problem in such a way that it is commonly understood. Alternative responses are generated and the possible outcomes, both positive and negative, to each are predicted. The board members review all the results that have been produced and arrange them in order of preference. The probability of each result is then determined. If a least preferred result has a high probability of occurring, then the response or responses that might bring about that result is an undesirable choice. A decision is then made to implement one alternative with a plan for periodic review. The application of the method is illustrated.

ECONOMICS OF HOSPITAL MANAGEMENT

See also Abstract No. 1438

1419. PLATTS, J. **All electric: an appraisal of some existing hospitals in Europe and North America.** *Hospital Development*, London, 1977, May/June, vol. 5, no. 3, pp. 22-23, 25.

In hospitals, as much as in other buildings, there is a pressing need for a careful appraisal of the way in which energy is used. Hospitals are long-life buildings; oil and natural gas are likely to be virtually exhausted within the planned life of new hospitals. One solution to this problem is the all-electric hospital. Three examples of such hospitals are described and appraised. Queen Fabiola Hospital Centre, Auvelais, Belgium; Provident Hospital, Baltimore, Md.; and Hôtel-Dieu de Gaspe, Quebec. Aspects covered include the building envelope, heating and ventilation, central plant, waste handling system, centralized control, catering, hot water service and security of supply.

1420. BASSFORD, G. L. and WHITE, H. C. **Achieving results: leadership style and small-group effectiveness.** *Hospital Progress*, St. Louis, 1977, April, vol. 58, no. 4, pp. 83-87.

Studies of organizations have demonstrated that there are great differences in the quantity and quality of work performed by individuals on identical tasks. The challenge of ensuring effectiveness and high rate of productivity is complex as staff procedures do not always ensure that the right person has been placed in the right job. A theory by F. E. Fielder regarding the interaction between leadership style and group environment was tested in a hospital. The theory behind the study and the possible rewards of applying the staff placement scheme leading to greater productivity are discussed. A method for overcoming resistance to the scheme in hospitals is presented. The long-term approach to forming effective hospital work groups would provide a set of guidelines for assigning staff. The costs associated with such a scheme would be negligible compared with the possible increased work-unit effectiveness contributing to high-quality patient care produced by the scheme.

RUNNING COSTS

See Abstract No. 1476

BED OCCUPANCY, ECONOMIC USE OF BEDS

See also Abstract Nos. 1463, 1496, 1511

1421. TODD, J. W. **The use of hospitals. 6. Analysis.** *Update*, London, 1977, April, vol. 141, no. 8, pp. 935-936, 938.

Previous papers in this series considered the use of hospitals under the headings: the hospital as an asylum; the short-stay in-patient; out-patient attendances; investigations; and specialized types of treatment. This final paper attempts to analyse the findings and reach general conclusions about the action needed to improve the situation. It is generally admitted that there is waste in the National Health Service and doctors must accept the blame for much of this. Ways in which the individual doctor can improve the situation are suggested. There are more than enough resources in the hospital service for short-stay in-patients, out-patients, investigations, and for

physiotherapy and other special departments. The future trend should be to improve the quality and distribution, and possibly increase the numbers, of general practitioners and to improve their facilities, so that fewer patients are sent to hospital. However there is a great and increasing demand for the provision of asylum for those who cannot live unaided. Many of these need not be hospitals as we know them with lavish provision for investigations, trained nursing staff and many doctors. A much simpler institution is often all that is required.

1422. KRELL, G. I. **Overstay among hospital patients: problems and approaches.** *Health and Social Work*, New York, 1977, Feb., vol. 2, no. 1, pp. 163-178.

The majority of extended stays in hospital are due to psychosocial problems such as unwillingness of a family to undertake home care, behaviour problems and lack of specialized resources in the community. A discharge planning ward could provide a recuperative period, thus freeing an acute bed and reducing the risk of re-admission. Hospitals should appoint a co-ordinator of continuing care services and provide a continuing care unit, such as exists at Boston City Hospital, to provide advice on after-care and keep a record of available beds in nursing homes. Hospitals should encourage the growth of their own nursing homes, or at least have arrangements with such homes to ensure back-up care for their patients. A centralized agency should provide nursing homes with ancillary services to hasten the patient's return home and a community clearing house should maintain a daily listing of nursing home beds. Home care services should come within a reimbursement scheme and larger hospitals should be required to maintain such services. To achieve these improvements in after-care and discharge planning, uniform staffing standards in the field of medical social work must be developed.

APPOINTMENT SYSTEMS, WAITING LISTS

See Abstract No. 1454

DATA PROCESSING

See also Abstract Nos. 1478, 1483, 1503, 1512

1423. SELTZER, R. A. and others. **Computerized radiographic reporting in a community hospital: a consumer's report.** *American Journal of Roentology*, Springfield, 1977, May, vol. 128, no. 4, pp. 825-829.

RAPORT is a commercially available automated radiographic reporting system designed to increase the speed of transmission of X-ray reports to the referring doctors. The system was tested in the diagnostic radiology department of Sequola Hospital, Redwood City, Calif., for 30 months, and the results analysed. By using the system, five radiologists were able to produce diagnostic X-ray reports in 65 per cent of all cases, decreasing report turnaround time without sacrificing reporting time The ability to present bills and statistics as a result of the system, resulted in the recouping of enough unpaid accounts to pay for the system's entire cost The disadvantages were that the radiologist had to learn new codes, change his reading habits and accept a limited, repetitive and stilted jargon.

LIBRARIES

1424. CUMMING, E. E. **Hospital and welfare library services: an international bibliography.** London, Library Association, 1977, 174pp. £8.50

This book is an international bibliography on hospital libraries, providing as comprehensive a list as possible of books and articles relating to library services for the sick and handicapped throughout the world. The completed bibliography has a total of 2164 entries. The earliest reference dated 1863 is to the catalogue of the patient's library in Murray Royal Psychiatric Hospital, Perthshire; the latest entries are dated 1972. An author index and a geographical index are included.

1425. RUTLAND, E. **Regional medical library service in Great Britain: early development.** *Canadian Library Journal*, Ottawa, 1977, Feb., vol. 34, no. 1, pp. 29-31.

The development of the regional medical library systems in Great Britain has been characterized by co-operation between the health and educational agencies directly concerned. The earliest schemes are described. The effect of regional co-operation in the Oxford Region has been to standardize cataloguing procedures, produce a union catalogue of periodicals and develop individual training sessions for librarians. The Oxford Regional system is compared with the Wessex Regional system. The overall developments of the regional medical library system in Great Britain are compared with the Canadian situation in which there is no administrative framework into which a medical library infrastructure can be fitted. Certain features of the British system can be adapted to the Canadian health services, but the essential ingredient for success is co-operation on the part of all concerned.

ORGANIZATION AND METHODS, WORK STUDY

1426. WEDEL, K. R. **Matrix design for human service organizations.** *Administration in Mental Health*, Rockville, 1976, vol. 4, no. 1, pp. 36-42.

The matrix organization is composed of one or more horizontal relationships superimposed upon a vertical, hierarchical structure. Horizontal relationships are co-ordinated through project managers who lead an assigned team of subordinates and deal with associates at different levels in the organization to direct major organizational tasks or projects. The chief attraction of the matrix design is its focus on the completion of specific work projects. Its value to human service organizations has yet to be demonstrated though it has been successful in industry. Two important issues in project team management are discussed: the use of popular management methodologies, and managing the human factor.

1427. **Administrative arrangements: Health and Safety at Work Act 1974. Audit of the standards of health and safety practices.** (Abstracts of Efficiency Studies in the National Health Service, No. 180.) London, Her Majesty's Stationery Office, 1977, [32]pp. £1.25

The District Management Team of the Lewisham Health District wished to establish a method by which the standards of health and safety practices within the District

could be audited to ensure that they satisfied the requirements of the Health and Safety at Work Act 1974. The audit system developed by the Management Services Team is described. A trial run was conducted to assess the effectiveness of the check list in six departments of Lewisham Hospital, and as a result the questionnaire was amended. The District Management Team found this system a satisfactory method of auditing the standards of its health and safety practices within their District, and as a result of the audit steps are now being taken to institute the necessary safeguards and precautions.

MEDICAL RECORDS

See also Abstract Nos. 1478, 1512

1428. SWIFT, P. N. and HAMILTON, P. J. S. **An assessment of the comparative advantages of paediatric activities using routine hospital records.** *Bulletin of the World Health Organization*, Geneva, 1976, vol. 54, no. 5, pp. 513-521.

The study examines the relative advantages, in terms of benefit to patients and salary costs, of various medical staff activities over a 23–month period in a busy children's ward at Mbale Hospital, Uganda. The study used data derived from in-patient records of 10,125 children aged from birth to five years. The results of hospital care were related to the number of physicians employed, the appointment of a consultant paediatrician and the time given by these staff to their principal activities. The salary costs were calculated. Standards of care were assessed by the quarterly 'failure' rate among children treated and the quarterly rates of 'failure' occurring within 24 hours of admission. Results showed that the care improved when the consultant was appointed, spending 17 hours a week in clinical care, but it was twice as expensive to reach the same standard of care using non-specialist physicians. These doctors however can be used effectively in decision-making and supervisory roles at a relatively low cost. Routine care of patients should be delegated as far as possible to nurses and auxiliaries, thus producing an expansion and upgrading of such classes of staff.

HOSPITAL STATISTICS

1429. AMERICAN HOSPITAL ASSOCIATION. DIVISION OF INFORMATION SERVICES. **Comparative statistics on health facilities and population: metropolitan and non-metropolitan areas.** Chicago, American Hospital Association, 1977, viii, 59pp. $6.00

A comparison is presented of indicators of health status, facilities, and services in metropolitan and non-metropolitan areas of the United States. Aspects considered include: population characteristics in metropolitan and non-metropolitan areas; hospitals in metropolitan areas; size distribution of community hospitals and counties with one community hospital or none; physicians in metropolitan and non-metropolitan areas; and additional statistical information compiled by the American Hospital Association.

HOSPITAL ACCREDITATION AND SIMILAR SCHEMES

See Abstract No. 1462

LEGAL ASPECTS OF HOSPITAL ADMINISTRATION

See also Abstract Nos. 1416

1430. BURSTEIN, H. **Hospital security management.** New York & London, Praeger, 1977, xii, 130pp. £11.10

The need to conserve and protect hospital assets has become increasingly important as the costs involved in delivering health care services rise in the United States. This book considers problems of security within hospitals and the difficulties of evaluating loss-prevention schemes. Aspects covered include: physical security; administrative-operational security; security department; patients; visitors; and emergencies. A bibliography is included.

FINANCE AND ACCOUNTING

1431. **Medical-care expenditure: a cross-national survey.** *Journal of Human Resources*, Madison, 1977, vol. 12, no. 1, pp. 115-125.

A study of the relationship between a country's medical-care expenditures and its income was carried out in the United States. The features examined included: medical care considered as a luxury good; and determinants of medical care expenditure. Both cross-nation and time-series (within nation) data support the conclusion that the income elasticity of national medical care expenditure is greater than one. This finding is consistent with the view that in developed countries medical-care services at the margin have less to do with common measures of health status and more to do with services that are less easily measured, such as relief of anxiety and accurate diagnosis. This explains much of the variation in expenditure and also suggests that a country will find methods by which to ration services consistent with its income despite variation in out-of-pocket prices paid by the consumer in various countries or alternative methods of reimbursing the physician.

FINANCE

See also Abstract Nos. 1379, 1462, 1467

1432. LALANDE, A.-C. Un rapport pour lutter contre l'inflation des dépenses de santé. **[A statement concerned with fighting the inflation of health expenditure.]** *Hospitalisation Nouvelle*, Paris, 1977, April, no. 59, pp. 15-19.

The Social Security Chief Medical Committee's first report to the Minister of Health on the control of expenditure recommends: (i) the avoidance of unnecessary admissions through greater use of out-patient departments and day hospitals; (ii) a reduction of the length of stay in hospital through the use of domiciliary nursing, convalescent homes, and hospices for the chronic sick; (iii) the involvement of the medical staff in the administration and management of the public hospital; (iv) limitations on the number of tests and procedures; (v) reductions in the number of prescriptions for drugs; (vi) stricter adherence to the hospital map in the matter of provision of equipment; (vii) stricter control of financing of research; (viii) assessment of the hospital's efficiency by means of quantitative and qualitative evaluation of care;

(ix) greater involvement of the sickness insurance institutions in the monitoring of expenditure; (x) better public health education; and (xi) the retention of a system which involves a direct financial contribution towards treatment, since a totally free health service invites irresponsibility on the part of the customer.

1433. HAVIGHURST, C. C. **Controlling health care costs.** *Journal of Health Politics, Policy and Law*, Durham, N.C., 1977, vol. 1, no. 4, pp. 471-498.

The United States Council on Wage and Price Stability has published recently three highly valuable reports on health care costs. One of them suggested that there is an unacknowledged potential in the private sector to exert influence and control in the area of health care cost inflation. This paper examines: (i) what the private sector is and is not doing; (ii) the problem of third-party payment without cost controls; (iii) sources of the problem (tax treatment of premiums provides resistance to cost control); (iv) what the private sector could do ('major-risk' insurance, specific exclusions, exclusion of certain catastrophic treatments; indemnity plans and utilization review); and (v) how these ideas relate to the health policy debate. In general, it is argued that private-sector efforts are likely to be more effective than government-sponsored controls as well as more appropriate in a pluralistic society.

1434. DE JONG, G. **Interfacing national health insurance and income maintenance: why health and welfare reform go together.** *Journal of Health Politics, Policy and Law*, Durham, N.C., 1977, vol. 1, no. 4, pp. 405-432.

The current debate in the United States on national health insurance has not given sufficient attention to the impact of various proposals upon income maintenance programmes. Health and welfare benefits are difficult to co-ordinate and frequently work at cross purposes. Health care benefits are one of several in-kind forms of income that can affect the economic behaviour and well-being of welfare recipients. As an in-kind form of income, subsidized health insurance for low income persons can undermine the objectives of public assistance, particularly the willingness to work, by making some individuals worse off when income rises. Five current proposals for national health insurance are analysed to determine how each would interface with cash transfer programmes. Most of these proposals perpetuate many of the benefit co-ordination problems that now exist with the Medicaid programme. The paper concludes by delineating some of the difficult policy decisions that must be made if health and welfare reforms are to be meaningful.

1435. FELDSTEIN, M. and FRIEDMAN, B. **Tax subsidies, the rational demand for insurance and the health care crisis.** *Journal of Public Economics*, Amsterdam, 1977, vol. 7, no. 2, pp. 155-178.

An individual's optimal insurance coverage depends on balancing his gain through avoiding risk against his loss through the distortion of his behaviour. The United States tax system subsidizes the purchase of excessive health insurance by excluding employer premium payments from employees' taxable incomes and by permitting the deduction of a portion of individual premiums. The current operational model of demand for health insurance shows that the tax subsidy does substantially increase

insurance coverage. Since much of the rise in health care costs can be attributed to the growth of insurance, the tax subsidy is responsible for much of what is widely perceived as a health care crisis.

1436. BARTER, R. W. **The New Zealand accident compensation scheme.** *Rheumatology and Rehabilitation*, London, 1977, May, vol. 16, no. 2, pp. 74-77.

The complex legislation concerned with the introduction of the New Zealand Accident Compensation Scheme and the effect of the scheme in the realm of compensation for personal injury are discussed. The basic principles of the scheme are community responsibility and universal entitlement to compensation. Earnings-related benefits are paid to the injured person and flat-rate payments to non-earners. The consequences of the scheme are the establishment of a large bureaucracy to administer the scheme, the contentious definition of personal injury and the high administrative costs.

HOSPITAL ACCOUNTING

See Abstract No. 1417

SUPPLIES AND STORES

PURCHASING

1437. HOUSLEY, C. **Stockless purchasing makes dollars and sense.** *Dimensions in Health Service*, Toronto, 1977, May, vol. 54, no. 5, pp. 24-26.

Traditionally hospitals have used central stores and some have developed off-site warehouses. A far better answer is to initiate, develop and fully implement the concept of stockless purchasing. Simply stated, this represents buying supplies for direct use by the respective departments without a duplication or accumulation in the central stores. For all practical purposes, the central store should only serve the nursing units since they basically use the same kind of standard supplies on a rapid turnover basis; this represents about 50 per cent of expendable supplies. The remaining 50 per cent are usually peculiar to one department and represent special handling and other considerations. The inventory in a stockless area should be kept to about a two-week level; a physical inventory should be taken on a quarterly basis. Establishing realistic quotas is the key to the success of the programme. The supplies officer should begin implementation of stockless purchasing with a department that has relatively few items so that quotas can be clearly quantified. Stockless purchasing results in less handling which means fewer man hours for the reviewing and supplying functions; at least three levels of handling can be eliminated.

1438. SHAUL, R. L. and MCLAUGHLIN, C. P. **A second look at leasing.** *Health Care Management Review*, Germantown, 1977, vol. 2, no. 2, pp. 55-63.

Leasing is a legitimate and convenient source of capital when a hospital needs new equipment. Arguments in support of leasing include reduced obsolescence, reduced apparent debt, administrative simplicity and favourable cash flow. These arguments

are examined in comparison with borrowing money to purchase equipment. A detailed cost comparison between borrowing and leasing is presented for a piece of radiological equipment with a market price of $177,600. This suggests that leasing contributes to higher medical care costs, even though it may help the administrator over short-term cash flow difficulties. This finding may not always apply, but managers cannot afford to accept rules of thumb like 'lease whenever possible'. In every case they must examine the relevant figures in detail; the assistance in this of a financial specialist is essential.

STORES

See Abstract No. 1447

LAUNDRIES AND LINEN SERVICE

LAUNDRIES

1439. SEGAL, L., MORRIS, C. E. and DRAKE, G. L. **Effects of hospital laundering and sterlization on FR fabrics.** *American Dyestuff Reporter*, New York, 1977, Jan., vol. 66, no. 1, pp. 39-54.

A study designed to carry laundering and sterilization to 50 cycles using an institutional laundry scheme, that included a chlorine bleach in the usual daily operations, was carried out in the laundry and central supply departments of Ochsner Foundation Hospital, Jefferson, La. Four commercial flame-retardant fabrics, three all cotton and one 65 per cent cotton/35 per cent polyester were all washed together at the same time in the same machine together with the usual laundry loads. The fabrics were flannelette treated with THPOH-NH3 and with modified Fyrol 76 type finish, sateen treated with THPC-amide and cotton-polyester flannelette treated with THPOH-NH3. After washing the fabrics were divided for drying, half tumble-dried and half-ironed. The dry fabrics were further divided for specimens included with normal sterilization loads in a steam autoclave. The effects of washing, method of drying and steam sterilization are discussed with respect to changes in inflammability as shown by trends in char length, oxygen index and elemental composition. The THPOH-NH3 finish was more resistant to steam sterilization than the other two phosphorous finishes.

HOSPITAL LINEN AND TEXTILES

See also Abstract Nos. 1439, 1444

1440. SAVAGE, J. H. **Mattress-tilting devices.** *Nursing Mirror*, Sutton, 1977, June 2, vol. 144, no. 22, pp. 32-34.

The author designed a light wooden sub-frame, slightly wider than a cot and 60 per cent of its length, which could be used to tilt the cot mattress to any angle, using two straps over the cot end. He then constructed a metal version with wire netting stretched across the frame and with a clamp to replace the straps. To adapt the sub-frame for use with a bed, two 'legs' were added each with a strap. The 'legs' were

extended upwards and were joined by a crossbar to support mountings for a new design of traction pulley [see Abstract No. 1389]. The final structure was all-metal, using various types of aluminium. Sliding metal bracket devices on the legs were designed to rest on the side rails near the foot of the bed. To improve on the strap method, a series of holes were made in the 'legs' and one hole in each sliding device, so that a split-pin could be used to secure each slider at the desired height.

HYGIENE IN THE HOSPITAL

See Abstract No. 1387

HOSPITAL INFECTIONS

See also Abstract Nos. 1443, 1468

1441. WAHBA, A. H. W. Les infections hospitalières: un danger permanent pour les malades et le personnel. **[Hospital infections: a permanent danger for patients and staff.]** *Hospitalisation Nouvelle*, Paris, 1977, May, no. 60, pp. 27, 29-30.

Hospital infection still presents an enormous problem and its solution requires co-operation and co-ordination. Current research is centred on four aspects of the problem: the patient, the micro-organisms, the environment, and administrative matters. The author lists 62 research studies now being carried out in 11 member states of the European region of the WHO.

SOURCES OF INFECTION

1442. MAKI, D. G., WEISE, C. E. and SARIFIN, H. W. **A semi-quantitative culture method for identifying intravenous-catheter-related infection.** *New England Journal of Medicine*, Boston, Mass., 1977, June 9, vol. 296, no. 23, pp. 1305-1309.

A semi-quantitative culture technique for identifying infection due to intravenous catheters is evaluated. Over a four-month period venous catheters from non-burned adult medical and surgical patients were studied at the University of Wisconsin Hospitals. Of 250 catheters studied 90 per cent had low-density colonization on semi-quantitative culture, although 19.6 per cent of these grew some organisms in broth or on a plate of blood agar. None of these catheters led to septicaemia. Ten per cent grew ≥ 15 colonies, and septicaemia originated from four of these catheters. Of 37 catheters exposed to bacteraemias from distant foci of infection, four yielded matching growth in broth. Local inflammation was associated with high-density colonization culture. The semi-quantitative technique distinguishes infection (≥ 15 colonies) from contamination and is more specific in the diagnosis of catheter-related septicaemia than the culture of the catheter in broth.

PREVENTION AND CONTROL

See also Abstract Nos. 1441, 1442

1443. SCHECKLER, W. E. **Septicaemia in a community hospital 1970 through 1973.** *Journal of the American Medical Association*, Chicago, 1977, May 2, vol. 237, no. 18, pp. 1938-1941.

Septicaemia developed in 34 patients per 10,000 admissions to St. Mary's Hospital Medical Centre, Madison, Wisc., between 1970 to 1973. Two thirds of the 207 patients had community-acquired septicaemia, and one third had hospital acquired septicaemia. The results of a study revealed that the rate of septicaemia-related mortality was 20.3 per cent. Mortality and incidence of septicaemia was higher in patients with fatal diseases. Septicaemia was associated with shock in 9.7 per cent of the patients. The study indicated a substantial difference between the incidence of septicaemia at St. Mary's Hospital and the higher incidences at non-community hospitals reported in the literature. Possible explanations for the differences are presented. Suggestions for action should be made with caution and viewed in relation to the underlying diseases of the population being studied.

1444. FRIED, D. A. and others. **The cotton gown as a barrier against contamination in the operating room.** *American Surgeon*, Philadelphia, 1977, Jan., vol. 43, no. 1, pp. 52-54.

A study to investigate the efficacy of the cotton gown as a means of preventing contamination in an operating room environment was carried out using Rodoc surface sampling plates consisting of soy agar with lecithin and polysorbate 80 prepared as a thin layer on the sterile plates. The plates were pressed against the chest and waist areas of both surgeons' and nurses' gowns using sterile techniques during 30 surgical procedures lasting two to three hours. The first set of plates were processed just after the gowns had been put on and new plates were used at one hour intervals. The plates were incubated at 35°C. The results indicated that total colony counts on the chest and the waist did not significantly increase with time and no significant differences between chest and waist were recorded. The results demonstrate that there is a lack of statistically significant bacterial transmigration at waist level in staff wearing cotton surgical gowns. However an increase in chest contamination suggests that the head and neck area continue to be a prime source of bacterial contamination.

HYGIENE IN THE OPERATING THEATRE

See also Abstract No. 1444

1445. OULTON, J. L. **Operating-room venting of trace concentrations of inhalation anesthetic agents.** *Canadian Medical Association Journal*, Ottawa, 1977, May 21, vol. 116, no. 10, pp. 1148-1151.

Recent studies of the effects of long-term inhalation of trace concentrations of anaesthetic gases are reviewed briefly. Sources of anaesthetic gas pollution in the operating theatre are three-fold: (i) overflow of gas via 'pop-off' valves and respirators; (ii) leaks in anaesthetic equipment; and (iii) errors in anaesthetic technique. Means

of preventing these are suggested. Also suggested are three methods of directing scavenged gases outdoors: (i) special duct system; (ii) hospital suction system; and (iii) hospital air-circulating system. At Vancouver General Hospital, operating theatre air is not recirculated but is exchanged 12 to 15 times per hour. Scavenging into this system has to provide not only continuous venting but also freedom from adjustment by the medical staff. The development of such a venting system is described and illustrated. The monitoring system used is outlined. The system has reduced nitrous oxide pollution to what is considered an acceptable level.

STERILIZATION

1446. LODGE, P. A. **A survey on job satisfaction in CSSD.** *ASSA Journal*, Matlock, 1977, May, vol. 5, no. 4, pp. 10-11.

The 16 assistants and one storekeeper in the central sterile supply department (CSSD) at Doncaster Royal Infirmary work permanently in one of three areas: reception and cleaning, packing (with three sub-divisions—(a) theatre, (b) ward and departmental, and (c) single instruments and propylene ware) and sterile store. Only relief staff work in other areas. This system replaced a six-week rotation scheme at the request of the staff. A 14-part questionnaire completed by the staff at their leisure was used in a job satisfaction survey. Completion of the questionnaire was followed by a personal interview with each of the staff and by an informal meeting with all staff in each work area. The main findings were: (i) reasons for applying for CSSD work were varied, but all continued to work there because they enjoyed the job and the atmosphere; (ii) the majority enjoyed all aspects of their work and had no particular likes or dislikes; (iii) all complained about the air-conditioning system; (iv) all felt part of a team and preferred to have their performance judged as a team rather than individually; and (v) only two assistants would like to return to the rotation system. The survey enabled the manager to resolve many minor difficulties. All the staff agreed the exercise was valuable.

1447. COX, M. **Taking stock of costing.** *Health and Social Service Journal*, London, 1977, May 27, vol. 87, no. 4543, pp. 858-859.

There is no nationally accepted method of pack costing. To meet the demand of outside users for a more credible method of charging, a variety of approaches has developed from the over-simple estimated level of service to highly sophisticated systems needing computer back-up. There are many problems to be overcome in arriving at a reasonably accurate pack cost, especially where the central sterile supply department (CSSD) regularly makes up instrument packs and tray sets as well as dressing packs. It is essential to have a separate manufacturing account in the ledger for the CSSD. All direct and indirect costs arising out of the production of sterile packs should be charged to this account, with the exception of disposables, which should preferably be put on to stores charge. In a manual system the item price to be used presents a problem—it may be possible to group items in broad categories and apply the hospital price index movements. There is no simple and realistic method of costing the labour content; methods outlined include: by pack, by item, by weighted item, and time groupings. It is not possible to charge items such as power, light and heat as overheads, but supervision, clerical staff, staff travelling expenses and mis-

cellaneous services can be estimated and expressed as a percentage of direct labour. There is no such thing as an accurate actual cost, but there are many ways of arriving at an acceptably accurate estimate.

AIR HYGIENE

See also Abstract No. 1445

1448. ENDERBY, D. H., ASKILL, S. and BUSHMAN, J. A. **Investigations of some aspects of atmospheric pollution by anaesthetic gases. I: diffusion of halothane across plastic and rubber tubes.** *British Journal of Anaesthesia*, London, 1977, June, vol. 49, no. 6, pp. 561-565.

Plastic and rubber tubing, of the types used to convey anaesthetic gases to and from the patient, or anaesthetic waste gases out of the operating theatre, were studied for their capacity to allow diffusion of halothane through the tube wall. The experimental arrangement and method of investigation are outlined. The magnitude of this effect was calculated in relation to pollution of the operating theatre atmosphere under different conditions. The practical considerations to prevent the diffusion of halothane are discussed.

1449. MEHTA, S. and others. **A passive method of disposal of expired anaesthetic gases.** *British Journal of Anaesthesia*, London, 1977, vol. 49, no. 6, pp. 589-593.

A passive method for the disposal of waste anaesthetic gases tried out at Burnley General Hospital, Lancs. is described. The resistance characteristics of the collector valve, pressure balancing device and the disposal system were studied. The results of the investigation revealed that the resistances offered by the conduction channels and the terminal exhaust valve were very low and the collector valves were found to be responsible for most of the expiratory resistance. The study revealed that the different components of scavenging equipment may be contaminated with bacteria. Most of the swabs taken from the various components of the system were contaminated with commensals and non-pathogenic organisms. No fungi could be isolated. As the gases in the scavenging system flow away from the patient it is unlikely that bacterial contamination would be transmitted to other patients.

1450. WHITCHER, C. and others. **Development and education of methods for the elimination of waste anesthetic gases and vapors in hospitals.** (HEW Publication No. (NIOSH) 75-137) Washington, U.S. Government Printing Office, 1975, x, [136]pp.

A study is presented of the health hazards affecting operating room staff and their possible relationship to the anaesthetic gases to which these people are exposed. The objective of the study is to present the information necessary to establish and maintain low anaesthetic gas concentrations in the operating department by using feasible commercially available control measures without major alternatives in established safe anaesthetic practices. The sources of trace agents are discussed as well as their distribution. Other aspects include: scavenging systems; exposure levels; equipment maintenance; and air monitoring. The recommendations for effective control are outlined.

DISPOSAL OF WASTE

1451. CHAMBERLAIN, C. T., COOKE, D. F. and COULSON, G. S. **Disposing of hospital waste problems.** *New Zealand Hospital*, Wellington, 1977, Feb., vol. 29, no. 1, pp. 15, 17, 19-20, 22.

The authors have developed and tested a simple method of determining the calorific value of different types of waste. This helps in designing hospital incinerators when the following criteria must be considered: (i) the complete destruction of solid waste; (ii) combustion chamber temperatures; (iii) control of smoke emission, and (iv) safe loading. Adequate supplies of primary air should ensure point (i) and temperatures of 800°C to 900°C are generally acceptable. The provision of automatic loading and combustion is increasing and most incinerators are fitted with an afterburner or post-combustion chamber to control smoke emission. Heat recovery boilers can be incorporated in the design of incinerators, but heat recovery in only economically viable where large amounts of waste are burned over a long period of time. Centralized incineration for all the hospitals in one group is both cheaper and more efficient.

SAFETY MEASURES

ACCIDENTS IN GAS AND DRUG ADMINISTRATION

See also Abstract No. 1448

1452. ANGARAN, D. M., WISE, R. L. and BIRNBAUM, M. L. **Hazards of mechanical ventilation—therapeutic implications.** *American Journal of Hospital Pharmacy*, Washington, 1977, April, vol. 34, no. 4, pp. 362-366.

Mechanical ventilation has grown in importance, sophistication and frequency in the last 10 years: its principles and use are outlined. The side effects and adverse reactions of positive pressure volume cycle respirators are discussed under the headings: pulmonary and blood gases; infections; cardiovascular effects; renal-fluid status; metabolic considerations; central nervous system effects; gastrointestinal effects; musculo-skeletal reactions; discontinuance of mechanical ventilation; and inhalation drugs. The pharmacist must communicate with both the physician and the respiratory therapist so that the patient's drug and ventilatory therapy are co-ordinated.

FIRES AND FIRE PREVENTION

1453. SJUKVÅRDENS OCH SOCIALVÅRDENS PLANERINGS- OCH RATIONALISERINGS-INSTITUT. Brandförsvar i sjukvårdsbyggnader. **[Fire protection in hospitals.]** 2nd edition. (Spri råd 6.18), Stockholm, Spri, 1977, 34pp.

Fire protection in the Swedish health service is controlled by fire laws, fire ordinances and the rules and memoranda of the National Fire Service Committee. The objectives of total fire protection include: preventing the outbreak of fire; protecting people in danger; preventing the fire from spreading; and extinguishing the fire. This report deals with the organizational aspects of fire protection in hospitals and suggests measures to be adopted. Technical fire protection planning is briefly considered

together with the technical measures necessary to achieve an acceptable level of fire protection in existing buildings. Recommended measures include: review of the fire protection organization in hospitals; review of the introduction and training of staff; review of the regulations governing fire protection in hospitals; and inventories of the fire load density of equipment, fire fighting and rescue equipment and the present fire protection status of existing hospitals.

THE PATIENT

ADMISSION AND RECEPTION

See also Abstract Nos. 1497, 1498, 1513

1454. LIPPANY, L. V. and ZINI, A. **Hospital admissions: taking control.** *Industrial Engineering*, Auckland, 1977, Feb., vol. 9, no. 2, pp. 22-25.

A patient scheduling model—Predictive Admission Scheduling System (PASS)—has been developed by the Blue Cross of Western Pennsylvannia in response to a need for a useful, effective method for scheduling hospital patients. The scheme consists of a series of weekly-updated parameters, such as number of discharges, emergencies and unused beds which determine the number of admissions. The system can be used both manually and by a computer. The method used is outlined. Examples of graduated tables that convert raw admission data into PASS parameter values, the computer programme and scheduling control forms are presented.

WELFARE OF THE PATIENT

See also Abstract Nos. 1384, 1491, 1493, 1514, 1523

1455. WASSENAAR, W. and others. **The measurement of anxiety in the pre-surgical patient.** *British Journal of Anaesthesia*, London, 1977, vol. 49, no. 6, pp. 605-608.

Sixty-nine female patients were assessed for anxiety before receiving premedication at Toronto General Hospital, Canada. All the patients were to receive dilation and curettage for either diagnostic or therapeutic purposes. Thirty-three patients were given lorazepam and 36 given papaveretum. Re-evaluation 90 minutes after premedication revealed that lorazepam reduced significantly the level of anxiety, but that papaveretum did not. Anxiety was measured by means of a five-point nurse-rating scale and the Multiple-Affect Adjective Check List self rating form. This self-rating anxiety scale was sensitive and proved suitable for use with recumbent patients in hospital. The scores compared favourably with previously published values.

1456. SOFLIN, D., YOUNG, W. W. and CLAYTON, B. D. **Development and evaluation of an individualized patient education program about digoxin.** *American Journal of Hospital Pharmacy*, Washington, 1977, April, vol. 34, no. 4, pp. 367-371.

The Biomedical Communications Department of the University of Nebraska Medical Centre developed an individualized audiovisual patient education programme about digoxin and congestive heart failure. It consisted of a slide/tape presentation which was reinforced by the pharmacist presenting the programme at the patient's

bedside. In a study of its value, each patient was randomly assigned to either the study group, who received the programme, or the control group, who did not. Both groups were given tests at the beginning and end of their hospital stay to determine the degree of learning that took place while they were in hospital. Patients in the study group demonstrated a significantly greater gain in knowledge about digoxin and congestive heart failure.

VOLUNTARY SERVICE, VOLUNTARY WORKERS

1457. SKEET, M. and CROUT, E. **Health needs help: results of a study into the role and preparation of volunteers working within the reorganized National Health Service.** Oxford, Blackwell, 1977, viii, 79pp. £1.95

This is a study into the role of the volunteer in the reorganized National Health Service including the preparation needed, and the kind of help patients, their families and professionals would like to receive. The aim of the study is: (i) to revise the preparation of volunteers; (ii) to involve doctors, nurses and volunteers in a study which will make them more acutely aware of the needs of patient; and (iii) to produce a report which will promote further study on a larger scale. Areas considered include: background to the study; action learning; involvement in the research process; information and findings; and survey material on voluntary workers. A bibliography and copies of the questionnaires used are included.

HOSPITAL SOCIAL WORK

1458. KERSON, T. S. **Values versus practice in client ratings.** *Health and Social Work*, New York, 1977, Feb., vol. 2, no. 1, pp. 78-91.

The author suggests that the relationship of social workers to their patients in the hospital environment encourages them to describe their patients in a negative fashion. Descriptions of their patients together with data on age, education, experience and hospital position were obtained from 31 social workers employed in four teaching hospitals on the United States eastern seaboard. Adjectives used were rated as positive or negative by the participants. Only nine out of the 31 described their patients positively and of the 20 negative descriptions, three were very negative. This shows that social workers in hospitals do not describe their patients in the more positive manner they are taught to use during training.

TRANSPORT OF PATIENTS

1459. WELCH, B. **Some considerations before using the aerial ambulance.** *Journal of the American College of Emergency Physicians*, Lansing, 1977, April, vol. 6, no. 4, pp. 155-157.

Aerial ambulance systems can transport patients and supplies quickly and the Federal Aviation Administration has set some basic equipment requirements, but further developments are needed and there may be clinical reasons why air travel is inadvisable. High altitudes can affect patients with cardiorespiratory disease, marginal oxygenation of tissues, sickle cell disease, and cardiac failure. Air volume expansion

at altitude can cause perforation and precipitate bleeding. Supplies of oxygen, suction apparatus, plastic intravenous bottles and a drug for air sickness must always be carried on board.

HOSPITAL CARE

See also Abstract Nos. 1411, 1486, 1504, 1515-1521

1460. LITTLE, D. E. and CARNEVALI, D. L. **Nursing care planning.** 2nd edition. Philadelphia, Lippincott, 1976, xiv, 325pp. £6.00

Important changes in nursing have dictated a very different approach to the second edition of 'Nursing Care Planning'. Nursing is sharply defining its contribution to health care, and consequently the book has attempted to make more explicit the system for nursing diagnoses and the organization of nursing knowledge. Aspects covered include: the nursing function, foundation and values of nursing care planning; various features of nursing assessment; the diagnostic statement; nursing care plans and systems; and the influence of the profession on current nursing care planning.

1461. ROSEN, H. M. and METSCH, J. M. **Problems in PSRO implementation: some lessons from innovation theory.** *Journal of Health Politics, Policy and Law*, Durham, N.C., 1977, vol. 1, no. 4, pp. 391-397.

Although there is an extensive literature on the professional standards review organization (PSRO), the critical area of potential barriers to PSRO implementation and continuation has not been fully treated. A more explicit treatment of constraints is needed to provide guidance for the early stages of development. This paper examines the evolving PSRO system in the light of three major areas delineated by innovation theory: sponsorship, credibility of participants, and continuity of innovative activities. The conclusions include: (i) serious consideration should be given to placing PSROs under the aegis of organizations with more innovative potential; (ii) the issue of director, and participant selection is important and has definite possibilities; (iii) the opportunity to develop a unidimensional continuum has passed, but some remedies are available; and (iv) it would be valuable to involve persons with skills in social psychology, social planning and organizational behaviour in the remaining phases of the PSRO development process.

1462. **Peer review seminar.** *Medical Journal of Australia*, Glebe, 1977, April 9, vol. 1, no. 15, supplement, pp. 27-54.

The proceedings are presented of a widely representative national, residential seminar on peer review organized by the Australian Medical Association. They include: a report commissioned by the Federal Council of the American Medical Association on peer review mechanisms in the United States, Canada and West Germany; papers on overseas experience, criteria auditing and the United Kingdom scene; and reports on group and plenary sessions on questions which need to be answered about peer review, opinions on peer review, methods of peer review used in Australia and characteristics necessary for peer review to be acceptable and effective in Australia.

DISCHARGE OF PATIENTS

See Abstract Nos. 1422, 1520, 1522

HOME CARE, AFTER-CARE

1463. GURURAJ, V. J. and others. **Utilization of hospital resources by community health programs.** *New York State Journal of Medicine*, New York, 1977, Jan., vol. 77, no. 1, pp. 58-61.

In order to determine the utilization pattern of a major municipal hospital's resources by community health schemes, medical records of patients referred to the Pediatric Ambulatory Service at Kings County Hospital, Brooklyn, N.Y., were reviewed. The study revealed that not only were the referrals far fewer, both in quantity and quality, than could be expected from the large population base served by the referring schemes but also were more often than not inappropriate, reflecting the inadequacy of many of these schemes. Surgical and pediatric specialty problems composed a large number of appropriate referrals.

SPECIAL DEPARTMENTS

ADMISSION UNITS

1464. TRIPODI, P. and CRISARI, G. L'astanteria oggi e domani. **[Reception wards today and tomorrow.]** *Tecnica Ospedaliera*, Milan, 1977, April, vol. 7, no. 4, pp. 20-27.

The authors outline the history and functions of the traditional reception ward attached to the hospital's emergency department, and present statistics based on experience in two Roman hospitals. The reception ward of the future will be used for patients who require X-rays or tests to see whether or not they need to be admitted to the hospital proper; for the washing and bathing of new patients; for patients for whom a very short stay is necessary (after minor injuries, minor surgery, etc.); for those who require temporary isolation; for alcoholics and psychiatric patients; for cases of diseases of psycho-social origin; and for patients whose ultimate destination within the hospital has not yet been decided or for whom a bed is not yet available.

ANAESTHESIA

See Abstract Nos. 1445, 1448-1450

PHARMACY

See also Abstract Nos. 1456, 1480, 1488

1465. TANNER, D. J. **Comprehensive pharmaceutical services in an 85-bed hospital: a one-year evaluation.** *American Journal of Hospital Pharmacy*, Washington, 1977, May, vol. 34, no. 5, pp. 486-490.

The economics of a comprehensive pharmaceutical service in a small hospital was evaluated. The pharmacy scheme used at Caldwell County War Memorial Hospital,

Princetown, Ky., includes total unit dose drug distribution, centralized compounding of intravenous admixtures and clinical involvement. Data was collected for two years before the development of the formal pharmaceutical services and the year after the development. The total cost of the pharmaceutical services was $5.66 per day, an increase of 106 per cent over the previous year. The revenue was $7.77, an increase of 72 per cent. The evaluation emphasises the need for assessing pharmacy schemes as an integrated system representative of the service of pharmacy. The need for an equitable method of third party payment for pharmaceutical services is discussed.

1466. AMEER, B. and JOHNSON, K. E. **Inservice pharmacy technician training program.** *American Journal of Hospital Pharmacy*, Washington, 1977, April, vol. 34, no. 4, pp. 383-388.

To meet the need for supporting staff in the expanded unit dose drug distribution system at Massachusetts General Hospital, Boston, a two-month, 300-hour in-service training programme was developed. A task-orientated approach was used to define the instructional objectives of the programme. Conferences and workshops were selected as the primary teaching methods to emphasize the job-related nature of the instruction. A specific instructional plan was designed for the drug conferences, giving the trainee an active role in the learning of drug names and dosage forms. Thirty per cent of the training time consisted of on-the-job experience, which was gradually incorporated into the programme. Staff pharmacists and supervisors did the teaching. During weekly evaluation sessions with each trainee, the co-ordinator discussed the trainee's performance, identified deficiencies and suggested means of improvement.

1467. LARSON, L. N. **Political aspects of budgeting in hospitals.** *American Journal of Hospital Pharmacy*, Washington, 1977, April, vol. 34, no. 4, pp. 387-389.

Politics is defined as 'the process by which power and influence are acquired and exercised'; it is not therefore limited to political party activities or government settings. It is in fact a part of organizational life. The political nature of the hospital budgetary process and the pharmacist's participation in that process are outlined. The following political factors in hospital budgeting are discussed: personal considerations; development of confidence among officials; institutional-philosophical considerations; demographic pressures; and information.

1468. GRAY, K. G. **Bacterial contamination in hospital pharmacies.** *Australian Journal of Hospital Pharmacy*, Prahran, 1977, vol. 7, no. 1, pp. 18-19.

It is not universally accepted that pharmacies should be checked for contamination. Obviously it is not possible to check every product, but certain precautions can be taken including: (i) not leaving water standing; (ii) drying benches with alcohol; (iii) storing mops, spatulas, brushes etc., dry; (iv) using disposable towels and soap packs, and (v) checking disinfectants and proprietary products for contamination.

1469. SALTER, C. S., WINSHIP, H. W. and TRINCA, C. E. **Pharmacist as applied pharmacologist in association with a pediatric clinical pharmacologist.** *American Journal of Hospital Pharmacy*, Washington, 1977, April, vol. 34, no. 4, pp. 372-376.

A study was conducted in the paediatric unit of the University Hospital, University of Arizona Medical Center, to determine the ability of the pharmacist to: (i) act as an

applied pharmacologist; and (ii) assist the paediatric clinical pharmacologist in providing drug information to attending paediatricians and influencing the treatment of patients. One hundred consecutive admissions were studied. The pharmacist attended ward rounds and closely followed patient treatment. He attempted to provide all information requested by the physicians and identify all problems in treatment without involving the pharmacologist. Regular meetings were held with the clinical pharmacologist at which the pharmacist made patient presentations and sought assistance in answering those requests for which he had been unable to provide sufficient information. The information provided by the pharmacist during the patient presentations was judged adequate for the clinical pharmacologist's evaluation of treatment in 96 per cent of cases. The pharmacist successfully answered 81 per cent of information requests and made 88 per cent of the recommendations directed at change in therapy without involving the pharmacologist.

1470. SAX, M. J. and others. **A systematic approach to drug therapy monitoring.** *Hospital Pharmacy*, Philadelphia, 1977, April, vol. 12, no. 4, pp. 155-157, 161-162.

In July 1975 a clinical pharmacy clinic was established at the Los Angeles Veterans Administration Clinic as part of a clinical pharmacy clerkship rotation programme developed jointly with the University of Southern California School of Pharmacy. It is staffed by an ambulatory care clinical pharmacy resident, who monitors and evaluates the drug use and responses to drug treatment of patients on long-term multiple-drug treatment prescribed by one or more physicians. Seven procedures are followed: (i) identify the patient's health problems or disease state; (ii) obtain comprehensive information on past and current drug use pattern; (iii) review appropriateness of drug treatment; (iv) evaluate data on drug use pattern; (v) establish a record for drug use and drug therapy monitoring; (vi) develop criteria or findings for monitoring responses to drug therapy both positive and adverse, according to a problem-orientated approach; and (vii) summarize and document all pertinent findings and information in a concise and objective manner for communication. An example of a patient's drug profile is reproduced.

1471. NAISMITH, N. W. **Clinical pharmacy—its future development.** *Australian Journal of Hospital Pharmacy*, Prahran, 1977, vol. 7, no. 1, pp. 15-17.

The term clinical pharmacy has been used to describe the role of the pharmacist in relation to patients, doctors and other hospital staff. The increased number of drugs available has led to the need for a clinical pharmacist as a therapeutic advisor at ward level, and this situation has been welcomed at the Royal Melbourne Hospital, Australia. In small hospitals in country areas, clinical pharmacists can operate effectively on a sessional basis. Many more studies must be carried out and a specialized course in hospital clinical pharmacy set up, before an effective clinical pharmacy scheme can be established properly.

1472. JONES, S. R. and others. **The effect of an educational program upon hospital antibiotic use.** *American Journal of the Medical Sciences*, Thorofare, 1977, Jan./Feb., vol. 273, no. 1, pp. 79-85.

The effect of an educational scheme on the use of antibiotics was studied in a university affiliated Veterans Administration Hospital in Texas. Two surveys were

carried out: the first provided baseline information concerning antibiotic use which was presented and analysed in an educational scheme; and the second survey measured the impact of the educational scheme. The results of the two surveys were analysed. There was a large number of uncontrolled variables between the two surveys. Meanwhile changes following the educational presentations were limited to decreasing costs of unjustified antibiotic use. An effect was noted on the lowering of the number of cases of unjustified use of antibiotics in prophylactic situations, but this still remained the most common form of misuse. There was little noticeable effect on the use of antibiotics and the study indicates that more direct measures may be needed to produce a change in prescribing methods.

1473. HOFFMAN, D. M. **A feasibility study of a decentralized unit dose and intravenous admixture system in a large cancer center.** *Hospital Pharmacy*, Philadelphia, 1977, April, vol. 12, no. 4, pp. 163-165, 168-170.

A survey of pharmacy services at the 467-bed Memorial Hospital for Cancer and Allied Diseases, New York, recommended pharmacist preparation of intravenous admixtures, implementation of a unit dose drug distribution system, 24-hour pharmacy coverage and improvement of record-keeping procedures. Because the pharmacy was located in the out-patient building a satellite pharmacy was established to serve two 38-bed units on a pilot study basis. It was staffed by a pharmacist and pharmacy technician from 0800 to 2200 Monday to Friday and 0800 to 2000 Saturdays, Sundays and holidays. The pharmacist relieved the nurses of most medication-related responsibilities; he also prepared intravenous admixtures on the unit. The system is described and examples of the forms used are reproduced. The three-month study demonstrated the value and feasibility of a decentralized unit dose and intravenous admixture programme in the specialized environment of a cancer centre. Medical, nursing, pharmacy and administrative staffs response to the system was favourable and plans are in hand to expand it to the whole hospital.

1474. KOTABE, S. E., RUPP, C. A. and BARRIERE, S. L. **Effect of unit dose packaging of respiratory therapy medications on incidence of pulmonary infections.** *American Journal of Hospital Pharmacy*, Washington, 1977, May, vol. 34, no. 5, pp. 492-495.

The effect on pulmonary infection rate of using respiratory therapy drugs packaged in unit-dose syringes versus multiple-dose vials was studied over a three month period at Mary's Help Hospital, Daly City, Calif. Information was collected from 141 patients; 78 were treated with drugs packed in unit dose syringes and the remainder received drugs from the multiple dose vials. Of the 83 patients who did not have pulmonary infections before treatment began 23 per cent developed one. There was no significant difference in the incidence of infection according to type of packaging. It had no effect upon those who had an infection before treatment began nor on the incidence of infection amongst those who were liable to infection. It is suggested that the decision to use unit dose packaging must be based upon factors other than the incidence of infection.

1475. PETRICK, R. J. and others. **Review of current knowledge of plastic intravenous fluid containers.** *American Journal of Hospital Pharmacy*, Washington, 1977, April, vol. 34, no. 4, pp. 357-362.

This paper reviews the following features of plastic intravenous fluid containers: (i) handling and storage; (ii) environmental and human contamination; (iii) particulate matter; (iv) water vapour transmission; (v) drug additives; (vi) leaching and adsorption; (vii) possible toxicity; and (viii) cost. From an administrative and financial standpoint, it would appear that if plastic containers were not priced competitively with glass, there would be no compelling justification to purchase them. The lack of particulate matter in plastic containers, as suggested by some investigators, may be medically outweighed or equal to the presence of plasticizers in the solution found in plastic containers. Thus from a medical point of view, various justifications can be presented for both glass and plastic containers. A list of 40 references to the literature is included.

DIAGNOSTIC X-RAY DEPARTMENT

See also Abstract No. 1423

1476. JONSSON, E. and MARKÉ, L.-Å. **CAT scanners: the Swedish experience.** *Health Care Management Review*, Germantown, 1977, vol. 2, no. 2, pp. 37-53.

This paper presents the findings of several Swedish studies that compare the uses and costs of computer-assisted tomography (CAT) with other diagnostic techniques, particularly cerebral angiography and pneumoencephalography. The results are presented in eight tables and three graphs and the assumptions used in the cost calculations are detailed in an appendix. The findings include: (i) in the first year the CAT scanner is used for about 1,000 to 2,000 examinations and the number increases thereafter; (ii) cerebral angiography is reduced by 25 to 70 per cent and pneumoencephalography by 50 to 90 per cent; (iii) the overall cost relation of CAT, cerebral angiography and pneumoencephalography is 1:7:11; (iv) staff costs represent 75, 65 and 30 per cent respectively of the total costs of cerebral angiography, pneumoencephalography and CAT; and (v) in Sweden each year, 400 to 500 patients who might otherwise require brain surgery for diagnostic purposes could be examined by CAT scanner instead. Graphs and tables are included showing the cost savings to be expected if various numbers of cerebral angiography and pneumoencephalography are replaced by CAT. The findings are discussed.

1477. VOSBURGH, K. G. **Storage and retrieval of radiographic images.** *Radiology*, Easton, 1977, June, vol. 123, no. 3, pp. 619-624.

A study of the existing systems for the storage and retrieval of radiographs in the United States hospitals was carried out to determine the applicability of new technology to problems in medical care. Radiographic storage practices are outlined and were found to be consistent among different types of hospitals. The reasons for keeping radiographs are discussed. About one third of American hospitals have serious problems of storage, and in particular lack of space. Most hospitals keep radiographs for four to seven years after the latest examination, but one third fall out of this range. Possible improvements to the present system are discussed, together with the use of

alternative storage technologies. The pressures on the systems for the storage and retrieval of radiographs are outlined. Additional aspects that require further study are: (i) measurements of the use and efficacy of stored radiographs in roentgen diagnosis; (ii) direct detailed measurements of the comparative diagnostic quality of 105mm copies vs. the original radiograph; and (iii) analysis of the improvements in the storage and retrieval of conventional radiographs made possible by computer control of radiographic files.

RADIOTHERAPY DEPARTMENT

1478. MÖLLER, T. R. and GUSTAFSSON, T. **An on-line method for the acquisition of medical information for computer processing as applied to radiotherapy.** *Computer Programs in Biomedicine*, Amsterdam, 1977, June, vol. 7, no. 2, pp. 117-124.

The Department of Oncology, University Hospital, Lund, Sweden, has developed an on-line data capture system based on a structural medical record specially designed for patients with malignant disease. This enables the collection of virtually any type of information contained in a patient's case notes. The record is typed on a typewriter terminal linked to a minicomputer. Data is recorded as code + heading + value string. The headings are identified automatically and an internal code generated, describing the type of information. Record keeping according to the principles described was introduced in clinical routine at the department in 1971. Data collection was implemented later that year, using an off-line magnetic tape encoder (IBM MT72). The system has been developed further and converted to a versatile on-line system. The data base now contains data on about 20,000 patients.

PHYSIOTHERAPY DEPARTMENT

1479. LALANDE, A.-C. Le chauffage électrique des piscines. **[Electrically heated swimming pools.]** *Hospitalisation Nouvelle*, Paris, 1977, April, no. 59, pp. 34-36.

The simplest form of electrical heating for swimming pools is the electric heater sited within the filtration system. Economies can be achieved by installing a heat pump which transfers calories from a cold source (river or sea water or external air) to the water in the pool. Furthermore the air around indoor pools can be dehumidified by passing it first over the cold part of the heat pump and then over the warm part of the pump to re-heat it. The various systems are explained in a series of five diagrams.

DEPARTMENTS FOR SPECIAL THERAPY

1480. CROME, P. and VALE, A. **The functions and services of a poisons unit.** *Mims Magazine*, London, 1977, April, no. 40, pp. 89-90, 92, 94, 96-98.

The Poisons Unit at Guy's Hospital, London, provides: (i) a centre for the British National Poisons' Information Service, (ii) an analytical service for many other hospitals; and (iii) research facilities to evaluate new methods of diagnosis and treatment of acute poisoning. The majority of enquiries to the National Poisons Information Service are handled by the London centre, 90 per cent being answered immediately from an index. A questionnaire sent to the doctor concerned in each enquiry produces data valuable in measuring the toxicity of various products and in designing pre-

ventive and educational measures. A wider use of supportive care, such as regular monitoring, together with the use of haemoperfusion to replace the older methods of removing fluids from the body, has greatly reduced deaths from poisoning. Treatments for paracetamol and paraquat poisoning are described. The Poisons Unit Laboratory carries out emergency screening procedures to detect drugs commonly taken in overdose and measures plasma concentrations in certain types of drugs.

1481. PINCHERLE, G. **Services for patients with chronic renal failure in England and Wales.** *Health Trends*, London, 1977, May, vol. 9, no. 2, pp. 41-44.

The history of long-term haemodialysis, peritoneal dialysis and renal transplantation are outlined. Results of treatment are now encouraging. The need for facilities for treatment is estimated at about 1,500 cadaver transplants a year, and about 5,200 patients on home dialysis and 2,650 on hospital dialysis at any one time. By contrast, in 1975, 542 transplants were undertaken, and 1,307 patients were on home dialysis and 623 on hospital dialysis. A table shows the considerable regional variations in the provision of services. Successful renal transplantation provides a more nearly normal life for the patients than dialysis and is also cheaper; expansion of this depends on increasing the availability of kidneys for transplantation and priority should be given to any method of achieving this. A few international comparisons are drawn and comments are made on prevention of renal failure and on the problems posed by foreign visitors.

INTENSIVE CARE UNITS

1482. CHEW, H. E. R. and HANSON, G. C. **A case for the medical administrator of an intensive therapy unit to be trained in intensive therapy.** *European Journal of Intensive Care Medicine*, Berlin, 1976, Nov., vol. 2, no. 3, pp. 107-110.

It is suggested that there should be post-graduate training schemes available for members of the medical profession who ultimately wish to work on an Intensive Therapy Unit (ITU) at Consultant level. The duties of the Medical Unit Administrator of a ITU in a District General Hospital are described and schemes are suggested for further training of an anaesthetist or physician particularly interested in critical patient care.

1483. ENDRESEN, J. and HILL, D. W. **The present state of trend detection and prediction in patient monitoring.** *Intensive Care Medicine*, Berlin, 1977, vol. 3, no. 1, pp. 15-26.

An investigation was carried out into the suitability of the following techniques for trend detection and forecasting in patient monitoring: Cusum; Trigg's Tracking Signal; the Patient Condition Factor; the Patient Alarm Warning System; Box-Jenkins models and the Harrison-Stevens Bayesian approach. The last named system has considerable promise since it is flexible and can be implemented on a microprocessor. Consideration has been given to the need for a better knowledge of the statistical properties of the variables to be monitored and the problems of combining trends detected in several variables.

SPECIAL HOSPITALS AND UNITS

OUT-PATIENT

See also Abstract No. 1504

1484. RAPHAEL, W. and MANDEVILLE, J. **Being an outpatient.** (King's Fund Project Paper No. 15) London, King Edward's Hospital Fund for London, 1977, 43pp. £0.50

This report concerns the design of a questionnaire for hospitals to assess the views of their own out-patients. The method used for the study is outlined. Surveys were carried out in nine general hospitals and three small hospitals attached to one of the large general hospitals. Questionnaires were completed by 30 consecutive patients in up to ten specialties in each hospital assessing the effect of waiting time upon the patient. The results of the survey and the action taken by participating hospitals are discussed.

1485. RICHARDSON, J. R. **Planning for ambulatory care.** *Hospital Administration in Canada*, Don Mills, 1977, May, vol. 19, no. 5, pp. 28, 30, 31.

The possible advantages of ambulatory care are outlined and a new method for planning ambulatory care facilities is described. Its newness is a product of the rudimentary difference between ambulatory and in-patient care. It ignores established indicators of the work load capability for hospital service units and takes readily available data from the British Columbia Medical Services Commission and British Columbia Hospital Programs data tapes. It determines the work load or the number of ambulatory procedures that will be done in the facility being planned, and ultimately produces an indication of the number of work spaces and/or staff that will be required to meet the need in specified future years.

1486. LAZES, P. M., WASILEWSKI, Y. and REDD, J. D. **Improving out-patient care through participation: the Newark experiment in staff and patient involvement.** *International Journal of Health Education*, Geneva, 1977, vol. 20, no. 1, pp. 61-68.

Like most urban hospitals, Martland Hospital, Newark, N.J., was plagued with inadequate communication and limited interaction between staff and patients. In order to resolve some of the problems, the Health Education Project of the College of Medicine and Dentistry of New Jersey began to work in the hospital in April 1973. Following three months of formal and informal meetings with staff and out-patients, the metabolic clinic, which treats patients with diabetes, was selected for intensive study and future use as a model for the out-patient department. Structured discussion groups with all out-patient staff and a questionnaire administered to 140 diabetic patients isolated eight problem areas. Means to overcome these problems were determined. Following further meetings with patients and staff, changes in routines and procedures were introduced, many with the aim of improving the exchange of information, for example the establishment of health education workshops. After 18 months, the percentage of appointments kept increased from 52 to 71 per cent, completion and availability of reports improved and patients responded positively to the changes.

CASUALTY AND ACCIDENT

See also Abstract No. 1492

1487. DRURY, C. G. and SCHIRO, S. G. **Evaluation of an EMS communications system.** *Journal of the American College of Emergency Physicians*, Lansing, 1977, April, vol. 6, no. 4, pp. 133-138.

The medical emergency radio system established in Erie County, N.Y., in March and April 1974 connects all 51 ambulances, 10 hospitals and a number of special services such as police and civil defence and provides two-way radio communications for hospitals to use in their area. This paper reports the first in-depth evaluation of such a system. The methodology used emphasized evaluation of problems in human/machine interface and the use to which radio information was put by the hospitals. Among the findings were: (i) the equipment was reliable, (ii) a check-out procedure could reduce needless calls for repair; (iii) knowledge of the system was poor, but improved with frequency of use; (iv) hospital staff felt the use of the system improved patient care to a greater degree than did ambulance staff; (v) the system could handle twice the volume of calls without significantly increasing the chances for interference; and (vi) the system was generally effective but changes in organization, training and human factors could enhance the usefulness of the system within the technological boundaries imposed by the radio equipment.

1488. QIRBI, A. A. and POZNANSKI, W. J. **Emergency toxicology in a general hospital.** *Canadian Medical Association Journal*, Ottawa, 1977, April 23, vol. 116, no. 8, pp. 884-886.

A study of all cases of attempted suicide by drug ingestion over a six month period was carried out to evaluate the use of an emergency toxicology service and to establish the role of the emergency toxicology laboratory in the diagnosis and management of cases of attempted suicide. A total of 235 requests for emergency toxicologic analysis involving 259 specimens was received at Ottawa Civic Hospital. Results of toxicologic screening were positive for 58 per cent of all cases. Barbiturate blood values did not correlate well with either the level of consciousness or the clinical state of the patient. In almost all patients who were drowsy or unconscious but with normal reflexes and vital signs there was no active treatment required. The study recorded the need to educate all staff involved in the care of patients with attempted suicide to limit laboratory analyses to those patients who would benefit from the investigations. Quantitative drug analyses have a limited contribution to make to the management of such patients and should be only performed for patients with mixed drug overdosage and when the drugs require dialysis for their elimination from the body.

CHEST

See also Abstract No. 1474

1489. HOLLEY, M. P. and BARTZOKAS, C. A. **Tuberculin testing in hospital personnel.** *Journal of Hygiene*, London, 1977, June, vol. 78, no. 3, pp. 325-329.

Over a period of three months at David Lewis Northern Hospital, Liverpool, there were 70 requests for examination and culture for mycobacteria from in-patients;

two were positive and both were from cases of open respiratory tuberculosis. It was thought advisable to check on immunity to tuberculosis of hospital staff. Tuberculin testing using the Tine test, revealed an alarming incidence of negative tuberculin reactors (68 per cent) for a group of 176 hospital staff, including nursing and technical staff; this high percentage was similar for each of the various groups of staff tested. The Tine test was found to be a convenient method of screening for sensitivity to tuberculin as it is simple to use and relatively painless, but it was not satisfactory because 30 per cent were doubtful reactors. In these cases, further tuberculin testing by the Mantoux reagent was always possible.

INFECTIOUS DISEASES AND ISOLATION

See Abstract No. 1489

CHILDREN

See also Abstract Nos. 1428, 1469, 1523

1490. NORTH, A. F., WILKINSON, P. and OLIVER, T. K. **Regional planning of hospital facilities for children.** *American Journal of Diseases of Children*, Chicago, 1977, April, vol. 131, no. 4, pp. 400-404.

A group of paediatricians, hospital administrators, surgeons and a social worker met in Pitsburgh to produce guidelines for regional planning of hospital facilities for children with the following facts in mind: (i) the total need for paediatric beds is small; (ii) the need that exists is specialized; and (iii) in-patient planning must co-exist with the planning of other services. Any hospital providing regular in-patient care for children should have a paediatric unit with 18 to 20 patients and 24 to 30 beds, providing isolation facilities, adequate space for education and recreation and, if possible, rooming-in accommodation for parents. There must be continuous coverage by nursing staff with special training in the care of children and specialists from other departments should be readily available. Some specialized categories of care can be limited to a few centres, including (i) neonatal and infant surgery; (ii) multiple trauma and extensive burns; and (iii) psychiatric in-patient care. Adolescents (11 to 19 years) can be accommodated in special areas of paediatric or adult units. A formula is described for calculating the paediatric bed needs of a particular region, for each of three age groups: (i) birth to one year; (ii) one to four years; and (iii) five to 14 years, allowing for 80 per cent occupation.

1491. EARTHROWL, B. and STACY, M. **Social class and children in hospital.** *Social Science and Medicine*, Oxford, 1977, Jan., vol. 11, no. 2, pp. 83-88.

It has often been suggested that it is cultural factors associated with social classes which lead to differences of attitude and belief and to variation in behaviour. It is also proposed that working class parents do not understand the social and emotional needs of their children. A survey of 1368 children discharged from Welsh hospitals after a short period of illness does not uphold these suggestions. The only major differences to emerge were associated with economic differences. The two methods of assessing the data were factor analysis and cross tabulation. The results obtained from the factor analysis do not contradict those of the cross tabulation. Aspects

considered included: previous hospital experience and pattern of admission; attitudinal differences; social distances between doctors and patients; and economic factors including transport and expenditure on other items. On the whole members of all classes wanted the same results for their children but were unable partly for cultural, though largely for economic reasons, to achieve these objectives to the same extent.

1492. ILLINGWORTH, C. M. **Paediatric accident and emergency: medical or surgical?** *Public Health*, London, 1977, May, vol. 91, no. 3, pp. 147-149.

Approximately one out of every six children in Sheffield attends the Accident and Emergency Department of the Children's Hospital, Sheffield, each year, and in 1975 the department dealt with 21,000 new cases, of which 12 per cent were admitted. A study of the admissions during five calendar months of 1974 revealed that a large proportion of the work is medical rather than simple trauma. Of those admitted 42.3 per cent were accidents, three per cent had mixed surgical conditions, 5.3 per cent had abdominal pain, 17.4 per cent had ingested poisons and 3.19 per cent had other medical conditions. The different types of care seen, the importance of social problems in both medical and surgical cases, and the time needed to deal with these problems was emphasized.

1493. LEVY, L. P. **Services to parents of children in a psychiatric hospital.** *Social Casework*, Albany, N.Y., 1977, April, vol. 58, no. 4, pp. 204-213.

Elmhurst Hospital, New York, is the receiving psychiatric hospital for the borough of Queens and consequently any child up to the age of 17½ needing emergency psychiatric care and treatment is admitted. The emphasis is on evaluation and diagnosis so that appropriate planning for the child's future treatment can be made. The service provided by the hospital is outlined. The nature of the setting provides parents with a unique opportunity for receiving help and support when they are most in need. The care of the child in hospital may be a pivot for the development of growth for both child and parent and may help in the adjustment of family relationships.

GERIATRICS AND LONG-STAY

1494. WILCOX, R., GERBER, R. M. and DEWALT, E. **Clinical research in nursing homes.** *Nursing Outlook*, New York, 1977, April, vol. 25, no. 4, pp. 255-257.

The clinical researcher in a nursing home must be aware that the level of patient care may vary and must understand the physiological and behavioural changes that accompany old age. Patients may be unable to sign the form of consent for research themselves and may react inconsistently to the researcher's activities, but the relationship improves if the researcher is willing to perform some tasks of basic care. Seminars, held to inform staff of the research being carried out, have an educational value for both staff and researchers. Members of both the professional and administrative staff of the nursing home should be involved in the development of the research project and the total cost of the study should be borne by the researchers.

1495. American College of Nursing Home Administrators. **Second North American symposium on long-term care and administration: proceedings September 16-18 San Francisco, September 23-25 Chicago, September 30-October 2 Boston, 1976.** Washington, American College of Nursing Home Administrators, 1977, v, 350pp. $10.00

These proceedings reflect the quality of discussions which took place during the Second North American Symposium on Long-Term Care Administration. Thirty papers are reproduced covering such topics as management skills, regulations, quality assurance, education, patient care and professionalism in long-stay care.

1496. Leeming, J. T. and Southern, R. M. **Too simple to be effective.** *Health and Social Service Journal*, London, 1977, June 3/10, vol. 87, no. 4544, p. 896.

More sophisticated means of assessing geriatric bed needs are required than the norm of 10 per thousand of the population aged 65 and over laid down by the Department of Health and Social Security in 1962. A breakdown of this norm reveals that a larger proportion of beds are occupied by patients over 75 than by those in the 65 to 74 age group. This makes planning easier, but still provides only a general indication of the beds needed. Admission at a greater age leads to longer stays, but these can be shortened by early acute admission and the provision of intermittent admission to allow relatives to have holidays and to carry out medical reviews. Liaison between community services and the hospital will also influence the length of stay of the patients.

1497. Ringoir, D. J. B. Het opnamebureau geriatrie. **[The geriatric admission centre.]** *Tijdschrift voor Sociale Geneeskunde*, Amstelveen, 1977, June 1, vol. 55, no. 11, pp. 410-415.

The centre, which has operated in Amsterdam since 1970 and is financed by the city, arranges for admissions of elderly and chronic patients into various types of nursing homes and the geriatric observation unit of Slotervaart Hospital, and acts as an information centre for attendant problems. Its operations rely on: (a) a central indication system based on medical and social reports; (b) a central admission system based on the available vacancies; (c) a good communication system including a team of one medical officer specializing in geriatrics, two nursing officers with local knowledge of homes and districts, and one administrator. Its working method is based on daily assessment of vacancies, urgency, diagnoses, geography and denominations, and on reports from individual visits, medical social services and patients' relatives. Advantages of the system are objective evaluation of patients, nursing homes and hospital for suitable allocations. These outweigh the disadvantages of some loss of direct contact between homes and hospital, and the costs. Some examples are given of calculations of average stay and waiting lists for various types of patients for various homes, based on 1975 figures. These help in the planning for future needs. The paper includes four tables and a list of references.

1498. Schouten, J. De werkwijze van de geriatrische afdeling van het gemeenteziekenhuis Slotervaart te Amsterdam. **[The procedure of the geriatric department of the Municipal hospital 'Slotervaart' at Amsterdam.]** *Tijdschrift voor Sociale Geneeskunde*, Amstelveen, 1977, June 1, vol. 55, no. 11, pp. 416-419.

The 142-bed geriatric observation department of the 700-bed Slotervaart Hospital

was opened in 1976 and incorporates two previously existing clinics of which a brief history is given. It comprises 88 beds for somatically ill and 54 beds for psychologically disturbed patients, accommodated on three floors with single, double, four and six-bedded wards. The head of the medical staff is a specialist in internal diseases. Patients are admitted at the request of medical practitioners, or from the municipal health services with whose representatives twice-weekly meetings are held. During 1976 a total of 1036 patients were admitted of whom 777 in the somatic unit averaged a stay of 43.3 days and 259 in the psychiatric unit averaged a stay of 53.8 days. Before discharge to any home the patient's case is discussed by a team of medical and social workers. The department runs a post-graduate course in geriatrics for medical and nursing staff during the winter months, is affiliated to Amsterdam University for half-yearly geriatric courses for student doctors, and gives monthly 'patient demonstration' days open to practitioners and medical staff from nursing homes and municipal health services. The low figure for nursing home beds in Amsterdam (2.45 per 1000 inhabitants, table 1), is attributed to this assessment department. The paper includes a list of references.

1499. JOLLEY, D. **Hospital inpatient provision for patients with dementia.** *British Medical Journal*, London, 1977, May 21, vol. i, pp. 1335-1336.

Present proposals are to provide 2.5 to 3.0 beds for every 1,000 people aged 65 and over to accommodate severely demented patients, while local authorities are expected to cater for mildly demented people when they are physically ill. This bed ratio was derived from the estimate of beds occupied by demented patients in psychiatric hospitals in 1971. However, many old people in hospital because of their need for mental nursing are to be found in chronic sick or geriatric hospitals. In South Manchester in November 1975, 21 beds were provided for elderly demented patients by psychiatric hospitals for a population of 193,000, of whom 28,000 were 65 and over. Local geriatric hospitals contained 59 patients whose sole disability was a severe dementia. In addition, a survey of old people's homes suggested that 10 per cent of the residents were severely demented—that is, 70 people derived from the catchment population. It seems essential therefore that the 1971 survey of in-patients be repeated and extended to include not only psychiatric hospitals, but also geriatric hospitals, and to be truly comprehensive it should include old people's homes. The figures from such a survey would provide a reasonable reflection of bed provision for elderly demented people now.

1500. KNUPFER, H. and NEUMANN, G. Betreuungsmassnahmen einer Beratungsstelle für Körperbehinderte in einem Gesundheitsamt. **[Welfare measures at a centre for the handicapped in a city health department.]** *Öffentliche Gesundheitswesen*, Stuttgart, 1977, May, vol. 39, no. 5, pp. 247-253.

This is an analysis of the consultations and services provided by the advice centre for the physically handicapped at the Stuttgart Health Department, as well as of services provided by other centres for which the advice centre made arrangements, for the year 1974. Services are grouped under the following heads: medical; educational industrial and professional; financial; and welfare and social. Separate details are given for three categories of patient: children; old age pensioners and those receiving social assistance; and adults in employment. A total of 824 services were provided for 184 children (an average of 4.5 per child). For pensioners these figures were 2035 and

400 respectively (an average of 5.1 per individual) while for working adults the figures were 2595 and 579 (an average of 4.5 per individual). Tables set out in detail the diagnoses and the facilities provided by group and sex.

NEUROLOGY AND NEUROSURGERY

See Abstract Nos. 1412, 1476

CARDIOLOGY

1501. De JONGH, T. P. **A system for remote computer electrocardiogram analysis via the switched telephone network.** *Medical & Biological Engineering & Computing*, Stevenage, 1977, May, vol. 15, no. 3, pp. 319-321.

A data terminal has been designed by the Netherlands Postal and Telecommunications Services to enable a general practitioner to transmit vector ECG to a remote computer, which provides a voice indication of the interpretation. The terminal has facilities for checking that the ECG signal is within range and that the noise and hum levels are satisfactory. The arrangement of the system is discussed.

1502. WATTS, M. P. and MACFARLANE, P. W. **3-lead electrocardiogram transmission over Post Office telephone lines.** *Medical & Biological Engineering & Computing*, Stevenage, 1977, May, vol. 15, no. 3, pp. 311-318.

A three-channel analogue f.d.m./f.m. system for the transmission of three-lead ECG over Post Office telephone lines has been developed by the Department of Medical Cardiology, Glasgow Royal Infirmary, following technical and economic considerations of both analogue and digital techniques. This system is used in conjunction with a low-speed digital telephone link to enable ECG from an outlying hospital to be transmitted to a central computer and analysed. The overall system has been in routine operation for over 17 months and has, with the exception of occasional interference from live-impulse noise, provided an effective method of reporting ECG from outlying hospitals.

1503. BROWER, R. W. and others. **Automatic data processing in the cardiac catheterization laboratory.** *Computer Programs in Biomedicine*, Amsterdam, 1977, June, vol. 7, no. 2, pp. 99-110.

A review of electronic data processing in the cardiac catheterization laboratory is presented. Emphasis is placed on on-line manometry, indicator dilution and off-line quantitative ventriculography. The system's organization is described and several special examples are given to illustrate the level of detail necessary to specify such a system. The clinical use of the system is described together with an evaluation of the original design goals in terms of the actual performance of the system. A few unexpected benefits have emerged with respect to quality control and reliability, but one of the original design goals, speeding up the catheterization procedure, has proved to be unrealistic. The next logical steps in the evolution of software and hardware are described, with emphasis on making the system a more effective tool for the clinician. A list of 80 references to the literature is included.

1504. LINDSAY, M. I. and others. **Outpatient medical care following hospital dismissal after myocardial infarction.** *Mayo Clinic Proceedings*, Rochester, Minn., 1977, March/April, vol. 52, nos. 3/4, pp. 220-227.

A study to compare process and outcome methods of quality assessment of medical care in out-patient practice was carried out over two years on 152 patients who had been admitted to St. Mary's Hospital, Rochester, Minn., or Rochester Methodist Hospital after their first acute myocardial infarction. Using weighted process criteria and a weighted performance index a significant link was demonstrated between care performed at the first visit after hospitalization and two year mortality. A significant association could not be demonstrated between later processes of care and outcome at two years. The results of the outcome assessment study indicated that predicted disability and mortality rates compared closely with observed outcomes. The advantages of the systems for evaluating the quality of medical care are discussed. Although both the process and outcome methods of quality assessment have shortcomings, the latter method is recommended because satisfactory outcome is the essential criterion of quality medical care. The need for further refinement of methods of outcome prediction for common illnesses is discussed.

UROLOGY

See Abstract No. 1481

SURGERY

See Abstract No. 1455

MATERNITY

1505. KING, A. E. M. **Changing patterns in maternity care in the 1970s.** *Nursing Mirror*, Sutton, 1977, June 9, vol. 144, no. 23, pp. 19-22.

While still concerned with reducing mortality, the extent of maternity care has widened considerably, particularly in the last 20 years, and is increasingly involved with improved quality of life and the reduction of maternal and infant morbidity and handicap. Two major changes form the background to the modern maternity service: the progressively falling birth rate, and the continuing trend towards hospital confinement (96 per cent of all births now take place in hospital). Early postnatal transfer from hospital to home was introduced initially to ease the bed situation, but it is now regarded as advantageous. The average length of post-natal stay is now five and a half days with 20 per cent of mothers and babies going home to the care of the general practitioner and midwife within two days or less. The effect of this on ante-natal and post-natal care and on the work of midwives is outlined. Improvements have been made in safety. The main threats to the quality of life for babies born in the 1970s are low birth weight, fetal hypoxia and congenital abnormality. The value of health education and the role of the midwife are discussed.

PSYCHIATRY

1506. OLDHAM, A. J. and GAIND, R. **Community psychiatry in a London borough: an eleven-year analysis of a socio-medical service for psychiatric illness.** *British Journal of Psychiatry*, Ashford, 1977, April, vol. 130, pp. 355-364.

A description of the North Southwark (formerly Bermondsey and Southwark) Psychiatric Service and a study of the service during 1964-67 has previously appeared (see *Hospital Abstracts*, Vol. 9, Abstract No. 1782). This paper describes the continuation of that study to cover the further period 1967-75 and comments on data relating to the whole 11-year period. In the light of the data, presented in eight tables, the following problem areas are discussed: (i) the fate of those growing old in hospital; (ii) the build-up of new long-stay patients for psychiatric conditions other than dementia; (iii) services for patients with dementia; (iv) the need for short-stay hospital beds for mental illness; (v) psychiatric day hospital services; (vi) out-patient and emergency services; and (vii) day centres and hostels for the mentally ill. The hospital bed and day place needs for adult mental illness were met over the 11-year period by numbers closely approximating to those recommended by the Department of Health and Social Security. If the bed needs for the old long-stay patients resident in Cane Hill Hospital were added, almost double the number of beds would be needed. Many of these would be suitable for hostel accommodation if it were available.

1507. WOOGH, C. M. and others. **Psychiatric hospitalization in Ontario: the revolving door in perspective.** *Canadian Medical Association Journal*, Ottawa, 1977, April 23, vol. 116, no. 8, pp. 876-879, 881.

A group of psychiatric patients in Toronto, first admitted to hospital in 1969, was followed up over a four-year period to establish a pattern of re-admissions. Diagnostic categories were psychoses (34 per cent), neuroses (34 per cent) and non-psychotic disorders (32 per cent). On first admission 62 per cent spent under one month in hospital and 8 per cent three months or longer, with an average stay of 29 days. During the four-year follow-up 69 per cent of the group were admitted once, 23 per cent were re-admitted once or twice, and eight per cent three times or more. Most of those with multiple re-admissions were under 25, but the relative proportions of diagnostic types on first admission did not alter significantly for re-admission. However, there was a greater proportion of functional psychoses, especially schizophrenia in men, among the re-admissions and also an equal representation of personality, addictive and other non-psychiotic disorders, especially among those under 25. Of those re-admitted four per cent returned on the day of discharge, 12 per cent within one week, 50 per cent within six months and 68 per cent within one year. The findings show that: (i) groups likely to be re-admitted several times can be predicted after one re-admission; and (ii) several short hospital stays are replacing long-term stays. Detailed results are shown in four tables.

1508. FISCHER, E. H. and LOHMAN, S. **Predicting outcome for mental hospital patients: who, what to ask.** *Journal of Nervous and Mental Disease*, Baltimore, 1977, Feb., vol. 164, no. 2, pp. 107-111.

The outcome for 62 patients in a general adult psychiatric unit at Connecticut Valley Hospital, Middletown, was predicted using background information, diagnoses

and staff ratings of behaviour as independent variables. Diagnoses and previous admissions correlated poorly with the outcomes, length of stay, subsequent re-admissions and post-hospital adjustment. Staff ratings were more reliable, and the open ward aides' estimates were of greater value than those of admission ward staff or professional staff. Staff predictions and judgement of patient behaviour yielded multiple correlations accounting for over 60 per cent of the variation in each outcome measure. In addition the patient's judged competence and post-hospital living standards were associated with his or her use of out-patient facilities.

1509. HARRIS, C. **Open dialogue systems: humanizing the designs of residential mental health programs.** *Journal of Humanistic Psychology*, San Francisco, 1977, vol. 17, no. 1, pp. 31-50.

The purpose of this paper is to develop a societal perspective for the design and management of residential mental health programmes which can provide organizational alternatives to the hospital model. The approach suggested here is characterized as an open dialogue system (ODS) because of its emphasis upon social and communicative factors in institutional treatment. Treatment is regarded throughout as a dialogue between the individual resident's potentials for growth and the restrictions and opportunities contained within the programme's social environment. ODS, represented by the therapeutic community and similar schemes, is compared with restrictive dialogue systems (the general hospital and traditional psychiatric hospital models) on four dimensions: (i) the character and location of knowledge within each system; (ii) the character of formal and informal role relations within each system; (iii) levels of involvement within each system; and (iv) the administrative process within each system.

1510. PATTISON, E. M. **Teaching mental health administration to psychiatric residents.** *Administration in Mental Health*, Rockville, 1976, vol. 4, no. 1, pp. 54-59.

Second-year psychiatric residents in the Department of Psychiatry and Human Behaviour, University of California, Irvine, are assigned to social and community psychiatry for a one-half time block of six months; the major emphasis is on mental health administration. The curriculum includes two days a week in a regional team; six hours per week clinical experience in the community setting; four hours per week mental health consultation to community agencies; and six hours a week activities related to administrative skills and knowledge. The orientation of the programme is based on social system theory. The students have to prepare three reports based on actual field data collected by them: analysis of community organization: analysis of service organization; and programme planning analysis.

1511. STERN, M. S. **Factors in the utilization of mental health centers and state hospitals.** *Hospital & Community Psychiatry*, Washington, 1977, May, vol. 28, no. 5, pp. 379-381.

A study to assess the relationship between geographic proximity of mental health organizations and the use of services was carried out at 11 mental health centres in North Carolina. The study considered the relationship of admission rates to distance, urban-rural differences, the complexity of the community referral network, and the availability of out-patient services. The study revealed that rates of admission to the

organizations tended to be higher as the counties became more urban, but that use of services was not related to distance. A strong relationship was found between distance and rates of admission to the state hospitals. Possible explanations for the relationship are presented.

1512. ST. CLAIR, C. and others. **Computerizing a mental health center information system.** *Administration in Mental Health*, Rockville, 1976, vol. 4, no. 1, pp. 10-18.

This paper explains step-by-step why it takes at least 15 months (probably a conservative estimate) to computerize a management information system in a complex organization like a community mental health centre. It describes the administrative, research, clinical and technical inputs needed to establish such a system in collaboration with an experienced computer firm. Two factors affected this particular exercise: Hahnemann Community Mental Health Center, Philadelphia, already had a detailed manual information system of several years' duration; and the nature of this large decentralized organization. The lessons learned, the issues involved and the trials and tribulations are discussed for each phase of the implementation of the system: planning (winter 1973-74); designing the input documents (spring 1974); preparing for conversion to a computerized system (summer 1974); implementing the conversion and designing the input documents (September 1974); monitoring the conversion process (October 1974); beginning the computerized system (November 1974); receiving outputs and entering remaining inputs (winter 1974-75; and the final stages (spring 1975).

1513. GILBOY, J. A. **Informal admission of patients to state psychiatric institutions.** *American Journal of Orthopsychiatry*, Albany, 1977, April, vol. 47, no. 2, pp. 321-330.

This paper describes the extent to which informal admission is used in state psychiatric hospitals in six states in the United States. Informal admission forms a very small proportion of admissions in Illinois, Kansas and New York, but accounts for over 60 per cent of admissions in Maine. Reluctance to use informal admission arises from the fear that: (i) hospital facilities will be open to mis-use; (ii) patients will discharge themselves before they have completed their treatment; (iii) the physicians' advice on when the patient should leave hospital may be ignored; and (iv) the hospital may be found legally liable for failing to retain a dangerous person. However, statistics do not bear out the fear of a high rate of self-discharge against medical advice among informal patients.

1514. COYE, J. L. **Michigan's system for protecting patients' rights.** *Hospital & Community Psychiatry*, Washington, 1977, May, vol. 28, no. 5, pp. 375-379.

Michigan's approach to protecting patients' rights is based on the statutory guarantee of these rights, through the 1975 mental health code, and on a set of specific administrative procedures. An office of recipient rights was established in the Department of Mental Health and rights advisors appointed in all 23 state institutions. The role of the state office and procedures carried out by the office are outlined. The state office monitors the actions of the state institutions and intervenes when necessary or when appealed to.

1515. CONDOM, J. E. **The treatment program at Searcy Hospital before and after Wyatt.** *Hospital and Community Psychiatry*, Washington, 1977, May, vol. 28, no. 5, pp. 370-371.

Staff at Searcy Hospital, Mount Vernon, Alabama, have attempted to make changes to improve the quality of care provided in the Institution. However, they were prevented from accomplishing very much due to lack of funding. The staff moved into the building where the patients lived, so that they would have more contact with them, and used a team approach to treatment. As a result the total number of patients decreased by 21 per cent between October 1969 and September 1970. The Wyatt litigation provided the impetus for the implementation of further changes that resulted in enhanced treatment schemes, a decrease in patient population and an increase in staff.

1516. DORMAN, L. B. **Community health services in Alabama after Wyatt.** *Hospital & Community Psychiatry*, Washington, 1977, May, vol. 28, no. 5, pp. 364-366.

The judicial decision in the Wyatt v. Stickney case in Alabama has resulted in the need for the state to allocate an even larger proportion of its limited resources to upgrading its psychiatric hospitals and institutions. The demand for resources has prevented the development of community services, and it comes at a time when many patients are being released from such institutions and need these services. Since the centres must care for increasing numbers of released patients other important preventive services, such as consultation and education are receiving less attention than they should.

1517. HELIER, H. W. **The Wyatt standards: an administrative viewpoint.** *Hospital & Community Psychiatry*, Washington, 1977, May, vol. 28, no. 5, pp. 362-363.

The major problems faced by an administrator in complying with court-imposed standards are discussed. The effect of the Wyatt v. Stickney order in Alabama is to provide a strong treatment-oriented scheme for mentally-ill patients. The administrator of Bryce Hospital, Tuscaloosa, outlines the changes relating to qualified mental health professionals, staffing ratios, staff attitudes, individualized treatment plans, and the hospital's negative image. The role of the human rights committee and the hospital's goal of providing treatment of sufficient quality that the court order will be lifted are also discussed.

1518. LEAF, P. **Wyatt v. Stickney: Assessing the impact in Alabama.** *Hospital & Community Psychiatry*, Washington, 1977, May, vol. 28, no. 5, pp. 351-356.

In 1971 a court ruling was made that patients involuntarily committed to Alabama psychiatric hospitals have a constitutional right to treatment, and 1972 this was followed by a court order containing 35 minimum constitutional standards for adequate treatment of psychiatric patients. Human rights committees were appointed to oversee the implementation of the order. The effect of the court order on Bryce Hospital, Tuscaloosa, Ala., is examined. The developments preceeding the case and the changes made as a result are outlined. There has been an increase in expenditure. The percentage of admissions remaining in hospital for more than one year has declined. The

ability to move patients into nursing and community care organizations has greatly improved. The effect of the litigation has been the shifting of responsibility for the treatment of psychiatric illness from the state to the local community and the federal government. The ruling has proved beneficial to the mental health system and to patients, yet the differences between humane treatment and effective treatment need to be examined in detail.

1519. RIVENBARK, W. H. **Implementing the Wyatt standards at Bryce hospital.** *Hospital & Community Psychiatry*, Washington, 1977, May, vol. 28, no. 5, pp. 356-361.

On October 23, 1970, staff and patients at Bryce Hospital, Tuscaloosa, Ala., filed a class-action suit against the Department of Mental Health to prevent the dismissal of 99 members of staff on the grounds that the loss of the staff members would leave the patients in the hospital without treatment. The result of the Wyatt v. Stickney case has had a major effect upon all psychiatric hospitals in Alabama. Staff working in four areas at Bryce Hospital: admissions area; chronic care; transitional services; and legal services, analyse the impact of the court order upon their own working areas.

1520. LEAF, P. **Patients released after Wyatt: where did they go?** *Hospital & Community Psychiatry*, Washington, 1977, May, vol. 28, no. 5, pp. 366-369.

The post-hospital outcome of a random sample of 228 patients released from Bryce Hospital, Ala., between June 1972 and June 1973 was studied. Approximately 72 per cent of the ex-patients participating in a follow-up study had been released from the hospital to a household containing a member of the family. The follow-up interviews between 1975 and 1976 revealed that approximately 63 per cent of the ex-patients were living in non-institutional settings and that the majority of the patients had not been re-admitted to a state psychiatric hospital since their release.

1521. WILDER, J. F. and ROSENBLATT, A. **An assessment of accountability areas by psychiatrists, psychologists, and social workers.** *American Journal of Orthopsychiatry*, Albany, 1977, April, vol. 47, no. 2, pp. 336-340.

Psychologists, psychiatrists and social workers, numbering 69 in all, were asked to assess the usefulness of 15 different aspects of their work at the Bronx Psychiatric Center, New York. Although those taking part differed in experience, training and position in the hospital staff structure, all gave similar ratings, the two highest concerning aspects of patient care and treatment. As clinicians, all three groups wanted to spend time helping patients, and their members worked well together as a team.

1522. KEMPF, S. H. and LOREI, T. W. **Rating the consequence of patient release from psychiatric hospitals.** *Health and Social Work*, New York, 1977, Feb., vol. 2, no. 1, pp. 194-200.

In an attempt to establish criteria for deciding whether to release or retain psychiatric patients, various consequences of release or retention were evaluated by 146 social workers from 11 psychiatric and two general hospitals. The social workers differed amongst themselves regarding the importance of the following factors: (i) whether the patient would be occupied after release; (ii) whether he or she would be satisfied

with the decision; (iii) the patient's right to freedom from being in an institution; and (iv) the patient's physical, psychological and financial condition after release. The different ratings were divided into groups. In general, social workers were relatively unconcerned whether released patients would find employment, but laid more emphasis on the role of the family, the community and other social resources in completing recovery.

1523. NAHME-HUANG, L. and others. **Imaginative play training and perceptual-motor interventions with emotionally-disturbed hospitalized children.** *American Journal of Orthopsychiatry*, Albany, 1977, April, vol. 47, no. 2, pp. 238-249.

This study was carried out on 36 children at the Connecticut Valley State Hospital to assess the impact of imaginative play training and movement classes on severely disturbed children. The children, with an average age of 12 years, were observed for ten minutes at a time and their behaviour rated against 17 variables. The six-week training period involved movement classes and dressing-up sessions conducted by two clowns. A control group did not participate in any of these activities. At the end of the six weeks each child was observed again twice. Results showed that only one hour a week of imaginative play produced an increase in bodily co-ordination and co-operativeness with their peers amongst the children, which continued beyond the training period, but some improvements fell quickly to the level of the control group. Possibilities and implications for future use of these methods are discussed.

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Spri. Box 1109, 11181 Stockholm, Sweden.
U.S. Government Printing Office, Washington, D.C. 20402, U.S.A.

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